Wireless USB Print Server User Guide

USRobotics

The Wireless USB Print Server can be used in any home or office network environment to share a USB printer via an Ethernet network or a wireless network. By using the USB Print Server to connect a USB printer to a wireless or Ethernet network device, such as a wireless router or a switch, the USB printer can be shared by each user on the network without having to tie up the resources of one computer to act as the dedicated print server.

System Requirements

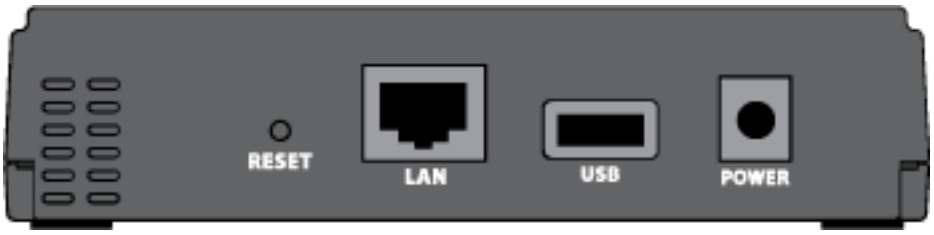
- A computer with an Ethernet internet connection
- The Installation CD-ROM that came with your printer
- An HTML 4.01-compliant Web Browser (such as Internet Explorer 5.5 or later or Netscape 8.0 or later) with JavaScript enabled
- Ethernet cable
- USB cable

Physical Features

LEDs

LED	State	Function
LAN	Solid	Ethernet LAN link is achieved.
	Flashing	Sending or receiving LAN data.
	Off	Not connected to LAN.
WAN	Solid	Ethernet WAN link is achieved.
	Flashing	Sending or receiving WAN data.
	Off	Not connected to WAN.
ACT	Flashing	Sending or receiving WAN data.
ERR	Solid	No printer connection is detected.
	Off	Printer is connected.

Back



Item	Function
RESET	Restores your print server to the factory default setting, or prints a test page. To restore your print server to the factory default settings: 1. Unplug the power adapter from the print server. 2. Press and hold the **RESET** button 3. Plug the power adapter back in to the print server. 4. Release the **RESET** button. To print a status page: • Press the **RESET** button once.
LAN	Connects the print server to your computer's Ethernet adapter.
USB	Connects the print server to your computer's USB adapter.
POWER	Connects your print server to the supplied power adapter.

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rev 0.4
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Wireless USB Print Server User Guide

USRobotics

U.S. Robotics Corporation Two (2) Year Limited Warranty

1.0 GENERAL TERMS:

1.1 This Limited Warranty is extended only to the original end-user purchaser (CUSTOMER) and is not transferable.

1.2 No agent, reseller, or business partner of U.S. Robotics Corporation (U.S. ROBOTICS) is authorised to modify the terms of this Limited Warranty on behalf of U. S. ROBOTICS.

1.3 This Limited Warranty expressly excludes any product that has not been purchased as new from U.S. ROBOTICS or its authorised reseller.

1.4 This Limited Warranty is only applicable in the country or territory where the product is intended for use (As indicated by the Product Model Number and any local telecommunication approval stickers affixed to the product).

1.5 U.S. ROBOTICS warrants to the CUSTOMER that this product will be free from defects in workmanship and materials, under normal use and service, for TWO (2) YEARS from the date of purchase from U.S. ROBOTICS or its authorised reseller.

1.6 U.S. ROBOTICS sole obligation under this warranty shall be, at U.S. ROBOTICS sole discretion, to repair the defective product or part with new or reconditioned parts; or to exchange the defective product or part with a new or reconditioned product or part that is the same or similar; or if neither of the two foregoing options is reasonably available, U.S. ROBOTICS may, at its sole discretion, provide a refund to the CUSTOMER not to exceed the latest published U.S. ROBOTICS recommended retail purchase price of the product, less any applicable service fees. All products or parts that are exchanged for replacement will become the property of U.S. ROBOTICS.

1.7 U.S. ROBOTICS warrants any replacement product or part for NINETY (90) DAYS from the date the product or part is shipped to Customer.

1.8 U.S. ROBOTICS makes no warranty or representation that this product will meet CUSTOMER requirements or work in combination with any hardware or software products provided by third parties.

1.9 U.S. ROBOTICS makes no warranty or representation that the operation of the software products provided with this product will be uninterrupted or error free, or that all defects in software products will be corrected.

1.10 U.S. ROBOTICS shall not be responsible for any software or other CUSTOMER data or information contained in or stored on this product.

2.0 CUSTOMER OBLIGATIONS:

2.1 CUSTOMER assumes full responsibility that this product meets CUSTOMER specifications and requirements.

2.2 CUSTOMER is specifically advised to make a backup copy of all software provided with this product.

2.3 CUSTOMER assumes full responsibility to properly install and configure this product and to ensure proper installation, configuration, operation and compatibility with the operating environment in which this product is to function.

2.4 CUSTOMER must furnish U.S. ROBOTICS a dated Proof of Purchase (copy of original purchase receipt from U.S. ROBOTICS or its authorised reseller) for any warranty claims to be authorised.

3.0 OBTAINING WARRANTY SERVICE:

3.1 CUSTOMER must contact U.S. ROBOTICS Technical Support or an authorised U.S. ROBOTICS Service Centre within the applicable warranty period to obtain warranty service authorisation.

3.2 Customer must provide Product Model Number, Product Serial Number and dated Proof of Purchase (copy of original purchase receipt from U.S. ROBOTICS or its authorised reseller) to obtain warranty service authorisation.

3.3 For information on how to contact U.S. ROBOTICS Technical Support or an

authorised U.S. ROBOTICS Service Centre, please see the U.S ROBOTICS corporate Web site at: www.usr.com

3.4 CUSTOMER should have the following information / items readily available when contacting U.S. ROBOTICS Technical Support:

- Product Model Number
- Product Serial Number
- Dated Proof of Purchase
- CUSTOMER contact name & telephone number
- CUSTOMER Computer Operating System version
- U.S. ROBOTICS Installation CD-ROM
- U.S. ROBOTICS Installation Guide

4.0 WARRANTY REPLACEMENT:

4.1 In the event U.S. ROBOTICS Technical Support or its authorised U.S. ROBOTICS Service Centre determines the product or part has a malfunction or failure attributable directly to faulty workmanship and/or materials; and the product is within the TWO (2) YEAR warranty term; and the CUSTOMER will include a copy of the dated Proof of Purchase (original purchase receipt from U.S. ROBOTICS or its authorised reseller) with the product or part with the returned product or part, then U.S. ROBOTICS will issue CUSTOMER a Return Material Authorisation (RMA) and instructions for the return of the product to the authorised U.S. ROBOTICS Drop Zone.

4.2 Any product or part returned to U.S. ROBOTICS without an RMA issued by U.S. ROBOTICS or its authorised U.S. ROBOTICS Service Centre will be returned.

4.3 CUSTOMER agrees to pay shipping charges to return the product or part to the authorised U.S. ROBOTICS Return Centre; to insure the product or assume the risk of loss or damage which may occur in transit; and to use a shipping container equivalent to the original packaging.

4.4 Responsibility for loss or damage does not transfer to U.S. ROBOTICS until the returned product or part is received as an authorised return at an authorised U.S. ROBOTICS Return Centre.

4.5 Authorised CUSTOMER returns will be unpacked, visually inspected, and matched to the Product Model Number and Product Serial Number for which the RMA was authorised. The enclosed Proof of Purchase will be inspected for date of purchase and place of purchase. U.S. ROBOTICS may deny warranty service if visual inspection of the returned product or part does not match the CUSTOMER supplied information for which the RMA was issued.

4.6 Once a CUSTOMER return has been unpacked, visually inspected, and tested U.S. ROBOTICS will, at its sole discretion, repair or replace, using new or reconditioned product or parts, to whatever extent it deems necessary to restore the product or part to operating condition.

4.7 U.S. ROBOTICS will make reasonable effort to ship repaired or replaced product or part to CUSTOMER, at U.S. ROBOTICS expense, not later than TWENTY ONE (21) DAYS after U.S. ROBOTICS receives the authorised CUSTOMER return at an authorised U.S. ROBOTICS Return Centre.

4.8 U.S. ROBOTICS shall not be liable for any damages caused by delay in delivering or furnishing repaired or replaced product or part.

5.0 LIMITATIONS:

5.1 THIRD-PARTY SOFTWARE: This U.S. ROBOTICS product may include or be bundled with third-party software, the use of which is governed by separate end-user license agreements provided by third-party software vendors. This U.S. ROBOTICS Limited Warranty does not apply to such third-party software. For the applicable warranty refer to the end-user license agreement governing the use of such software.

5.2 DAMAGE DUE TO MISUSE, NEGLECT, NON-COMPLIANCE, IMPROPER INSTALLATION, AND/OR ENVIRONMENTAL FACTORS: To the extent permitted by applicable law, this U.S. ROBOTICS Limited Warranty does not apply to normal wear and tear; damage or loss of data due to interoperability with current and/or future versions of operating system or other current and/or future software and hardware; alterations (by persons other than U.S. ROBOTICS or authorised U.S. ROBOTICS Service Centres); damage caused by operator error or non-compliance with instructions as set out in the user documentation or other accompanying documentation; damage caused by acts of nature such as lightning, storms, floods, fires, and earthquakes, etc. Products evidencing the product serial number has been tampered with or removed; misuse, neglect, and improper handling; damage caused by undue physical, temperature, or electrical stress; counterfeit products; damage or loss of data caused by a computer virus, worm, Trojan horse, or memory content corruption; failures of the product which result from accident, abuse, misuse (including but not limited to improper installation, connection to incorrect voltages, and power points); failures caused by products not supplied by U.S. ROBOTICS;

damage cause by moisture, corrosive environments, high voltage surges, shipping, abnormal working conditions; or the use of the product outside the borders of the country or territory intended for use (As indicated by the Product Model Number and any local telecommunication approval stickers affixed to the product).

5.3 TO THE FULL EXTENT ALLOWED BY LAW, THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, TERMS, OR CONDITIONS, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES, TERMS, OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, CORRESPONDENCE WITH DESCRIPTION, AND NON-INFRINGEMENT, ALL OF WHICH ARE EXPRESSLY DISCLAIMED. U.S. ROBOTICS NEITHER ASSUMES NOR AUTHORISES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, WARRANTY, OR USE OF ITS PRODUCTS.

5.4 LIMITATION OF LIABILITY. TO THE FULL EXTENT ALLOWED BY LAW, U.S. ROBOTICS ALSO EXCLUDES FOR ITSELF AND ITS SUPPLIERS ANY LIABILITY, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE), FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY KIND, OR FOR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA, OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF ITS PRODUCTS, EVEN IF U.S. ROBOTICS OR ITS AUTHORISED RESELLER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND LIMITS ITS LIABILITY TO REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE PAID, AT U.S. ROBOTICS OPTION. THIS DISCLAIMER OF LIABILITY FOR DAMAGES WILL NOT BE AFFECTED IF ANY REMEDY PROVIDED HEREIN SHALL FAIL OF ITS ESSENTIAL PURPOSE.

6.0 DISCLAIMER:

Some countries, states, territories or provinces do not allow the exclusion or limitation of implied warranties or the limitation of incidental or consequential damages for certain products supplied to consumers, or the limitation of liability for personal injury, so the above limitations and exclusions may be limited in their application to CUSTOMER. When the implied warranties are not allowed by law to be excluded in their entirety, they will be limited to the TWO (2) YEAR duration of this written warranty. This warranty gives CUSTOMER specific legal rights, which may vary depending on local law.

7.0 GOVERNING LAW:

This Limited Warranty shall be governed by the laws of the State of Illinois, U.S.A. excluding its conflicts of laws principles and excluding the United Nations Convention on Contracts for the International Sale of Goods.

U.S. Robotics Corporation
935 National Parkway
Schaumburg, IL, 60173
U.S.A

Wireless USB Print Server User Guide

USRobotics

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60173-5157
USA

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in, or delivered to you in conjunction with, this Quick Installation Guide.

Wireless USB Print Server User Guide

USRobotics

Regulatory Information

Manufacturer's Declaration of Conformity

U.S. Robotics Corporation
935 National Parkway
Schaumburg, IL 60173
U.S.A.

declares that this product conforms to the FCC's specifications:

Part 15, Class B

Operation of this device is subject to the following conditions:
1) this device may not cause harmful electromagnetic interference, and
2) this device must accept any interference received including interference that may cause undesired operations.

This equipment complies with FCC Part 15 for Home and Office use.

Caution to the User: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

Radio and Television Interference:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy. If this equipment is not installed and used in accordance with the manufacturer's instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

USR declares 5436 and 5436A are limited in CH1~11 from 2412 to 2462 MHz by specified firmware controlled in USA.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

UL Listing/CUL Listing:

This information technology equipment is UL Listed and C-UL Listed for both the US and Canadian markets respectively for the uses described in the User Guide. Use this product only with UL Listed Information Technology Equipment (ITE).

For Canadian Users

Industry Canada (IC)

This equipment complies with the Industry Canada Spectrum Management and Telecommunications policy, RSS-210, standard Low Power License-Exempt Radio Communication Devices.

Operation is subject to the following two conditions:

1. This device may cause interference.

2. This device must accept any interference, including interference that may cause undesired operation of the device.

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding.

Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the Equivalent Isotropic Radiated Power (EIRP) is not more than that required for successful communication.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make electrical ground connections by themselves, but should contact the appropriate inspection authority or an electrician, as appropriate.

CE Compliance

Declaration of Conformity

We, U.S. Robotics Corporation of 935 National Parkway, Schaumburg, Illinois, 60173-5157 USA, declare under our sole responsibility that the products, U.S. Robotics Wireless USB Print Server, Models 5436 and 5436A, to which this declaration relates, are in conformity with the following standards and/or other normative documents.

EN300 328
EN301 489-1
EN301 489-17
EN60950
EN61000-3-2
EN61000-3-3
EN50392

We, U.S. Robotics Corporation, hereby declare the above named product is in compliance and conformity with the essential requirements and other relevant provisions of Directive 1999/5/EC.

The conformity assessment procedure referred to in Article 10 and detailed in Annex IV of Directive 1999/5/EC has been followed.

This equipment is in compliance with the European recommendation 1999/519/ECC, governing the exposure to the electromagnetic radiation.

This product can be used in the following countries:

Germany, Austria, Belgium, Switzerland, Netherlands, Luxembourg, Italy, France, UK, Ireland, Spain, Portugal, Sweden, Norway, Denmark, Finland, Czech Republic, Poland, Hungary, and Greece

An electronic copy of the original CE Declaration of Conformity is available at the U.S. Robotics website: **www.usr.com**

Regarding IEEE 802.11b/g frequencies, we currently have the following information about restrictions in the European Union (EU) countries:

- Italy: Please be aware that use of the wireless device is subject to the following Italian regulation:

    1. D.Lgs 1.8.2003, number 259, articles 104 (activities where General Authorization is required) and 105 (free use), for private use;

    2. D.M 28.5.03 and later modifications, for the supplying to public RadioLAN access for networks and telecommunication services

- France

    In France metropolitan, outdoor power is limited to 10mW (EIRP) within 2454MHz – 2483, 5MHz frequency band

In Guyana and Reunion Islands, outdoor use is forbidden within 2400MHz – 2420MHz frequency band

Regulatory Channel Frequency

Channel	Frequency (MHz)	FCC	Canada	ETSI
1	2412	X	X	X
2	2417	X	X	X
3	2422	X	X	X
4	2427	X	X	X
5	2432	X	X	X
6	2437	X	X	X
7	2442	X	X	X
8	2447	X	X	X
9	2452	X	X	X
10	2457	X	X	X
11	2462	X	X	X
12	2467			X
13	2472			X

Operating Channels :	• IEEE 802.11g compliant • 11 channels (US, Canada) • 13 channels (ETSI)

EU Health Protection

This device complies with the European requirements governing exposure to

electromagnetic radiation. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body. This wireless device is a transmitter/receiver and has been designed and manufactured to comply with the exposure limits recommended by the Council of the European Union and the International Commission on Non-Ionizing Radiation Protection (ICNIRP, 1999) for the entire population. The exposure standard for portable equipment uses the "Specific Absorption Rate" as unit of measure. The maximum SAR value of this wireless device measured in the conformity test is 0.002 W/kg.

Go to **www.usr.com** to see the most recent channel restriction information.

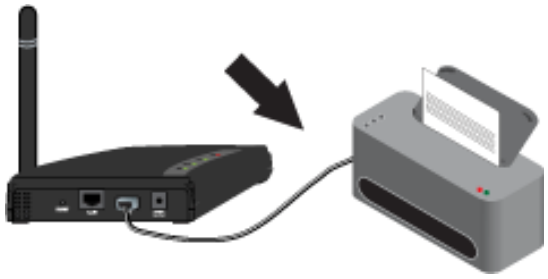
Wireless USB Print Server User Guide

USRobotics

Step One: Connect the Wireless USB Print Server

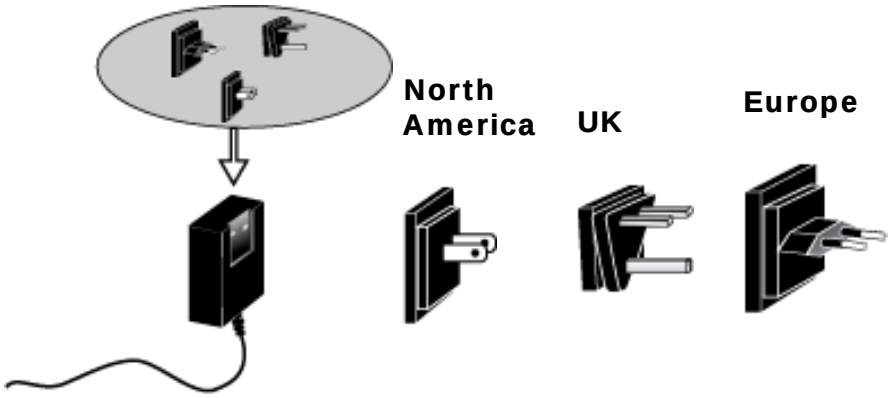
Note: The Wireless USB Print Server must be connected using an Ethernet cable for the initial configuration. After the initial configuration, you can establish a wireless connection to the network.

1. Turn on your printer.
2. Connect one end of the USB cable to the USB port on your printer, and connect the other end of the USB cable to the **USB** port on the Print Server.



3. Connect one end of an Ethernet cable to your wireless or wired router and the other end to the **LAN** port on the Print Server.

4. Slide the standard power plug for your country on to the power adapter. Apply enough pressure to cause a click and firmly seat the plug. The power adapter must be unplugged when you attach the plug.



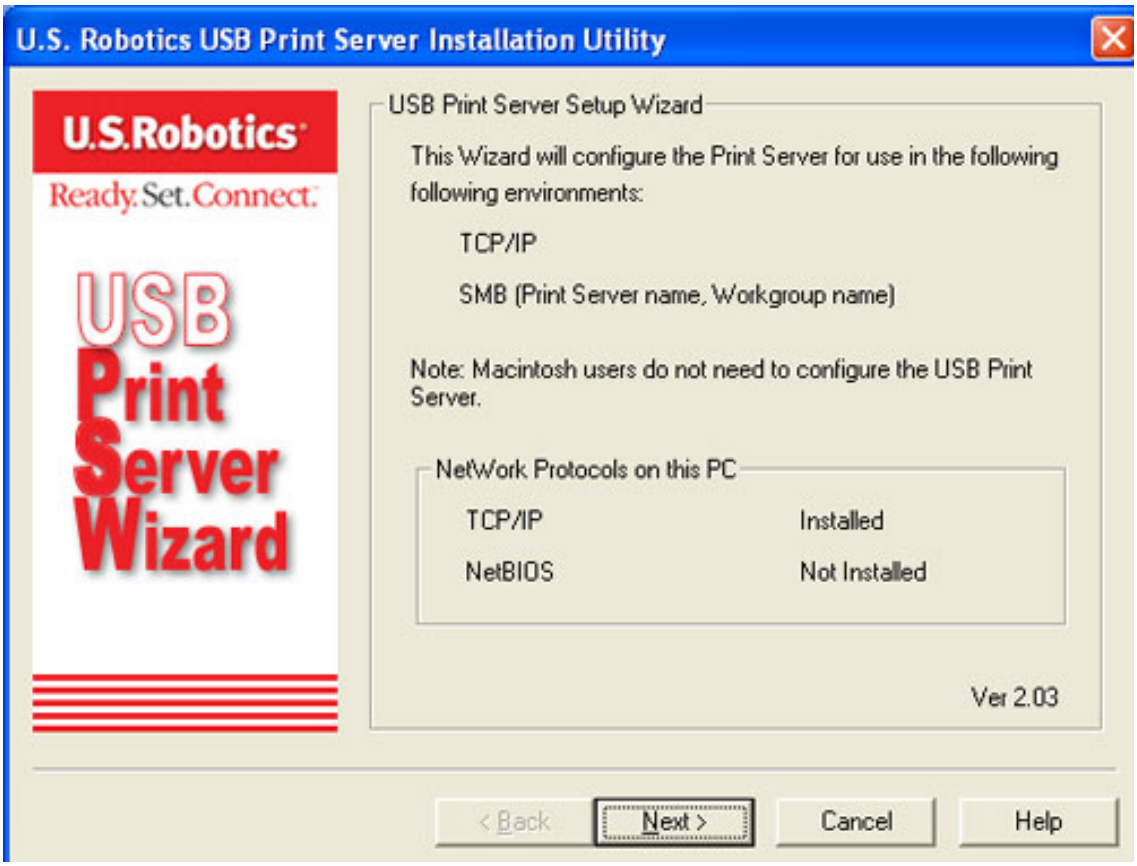
5. Connect the included power adapter to the **POWER** port on the Wireless USB Print Server and plug the power adapter into a standard power outlet.

Step Two: Configure the Wireless USB Print Server

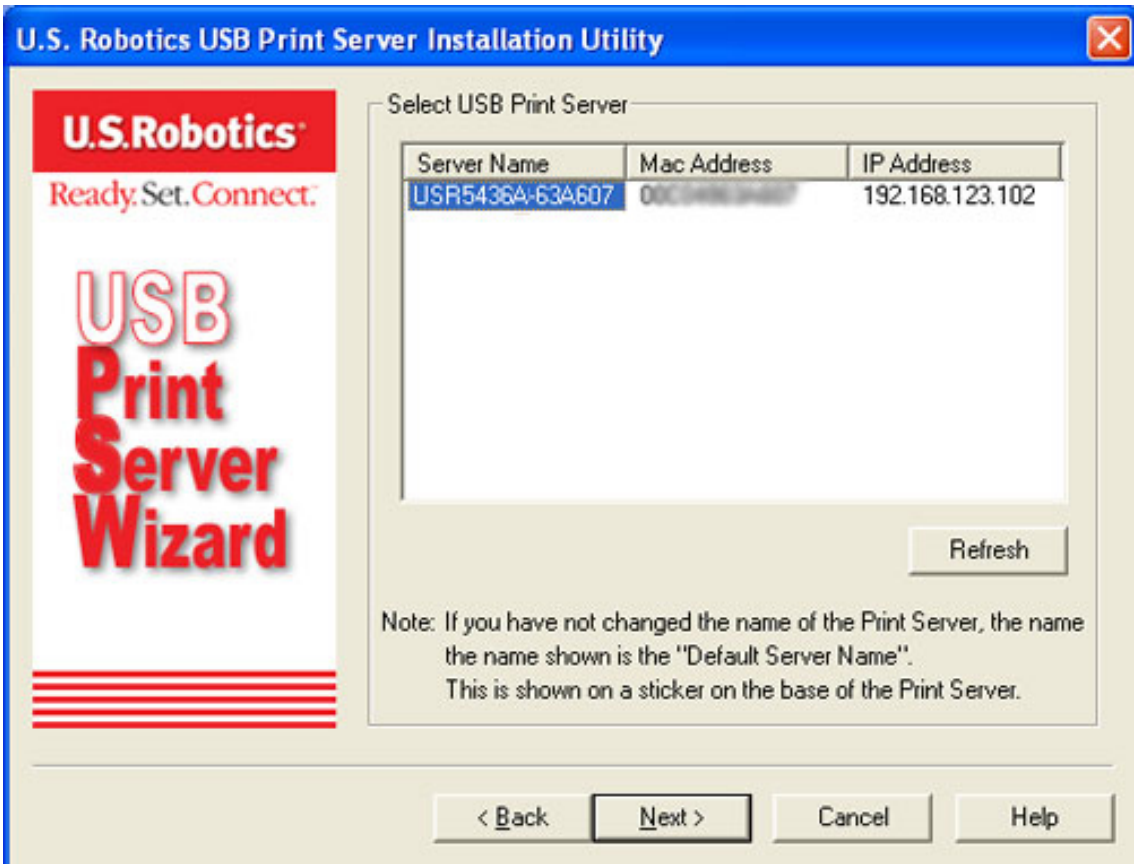
1. Verify you are logged on to your computer as an administrator. You must be logged on as an administrator to ensure the software will be properly installed.

2. Insert the U.S. Robotics Installation CD-ROM.

2. Click **Setup Wizard** and then click **Next**.

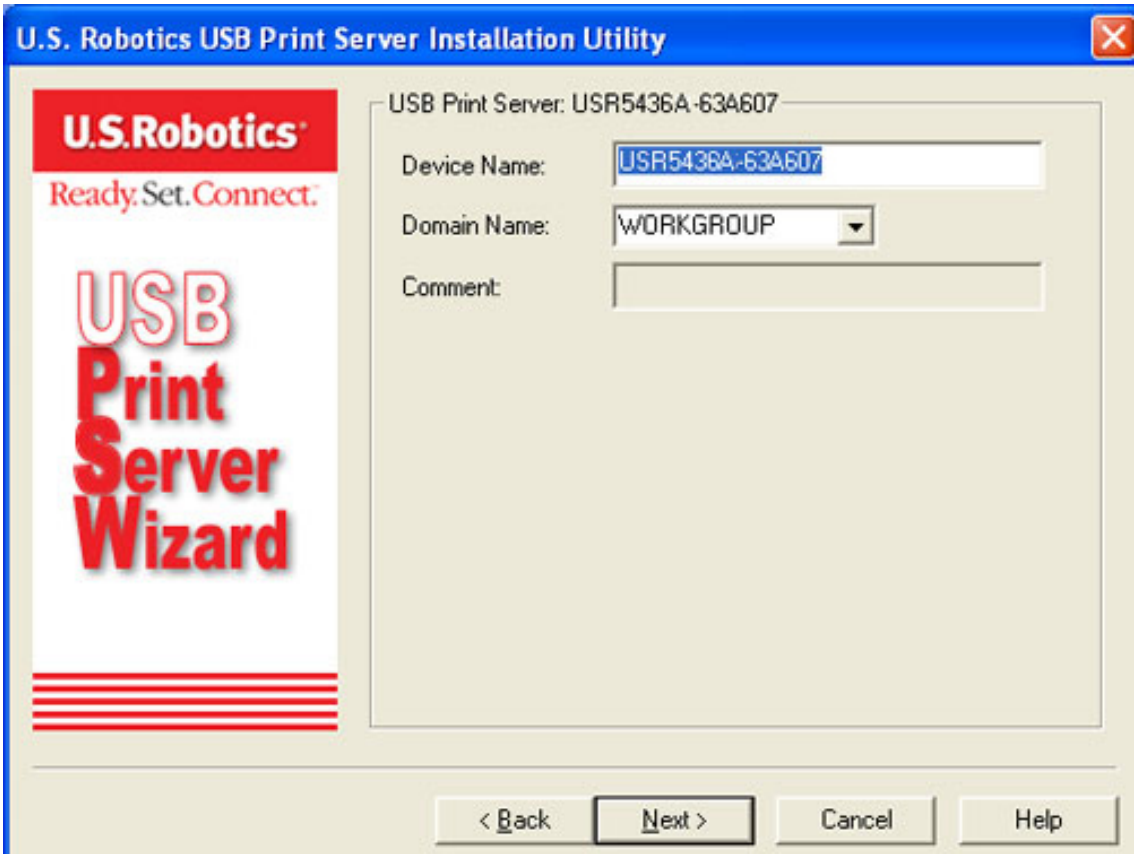


3. The Wireless USB Print Server will be shown in the list. Select the print server in the list and click **Next**. If it does not appear in the list, check your physical connections and click **Refresh**.

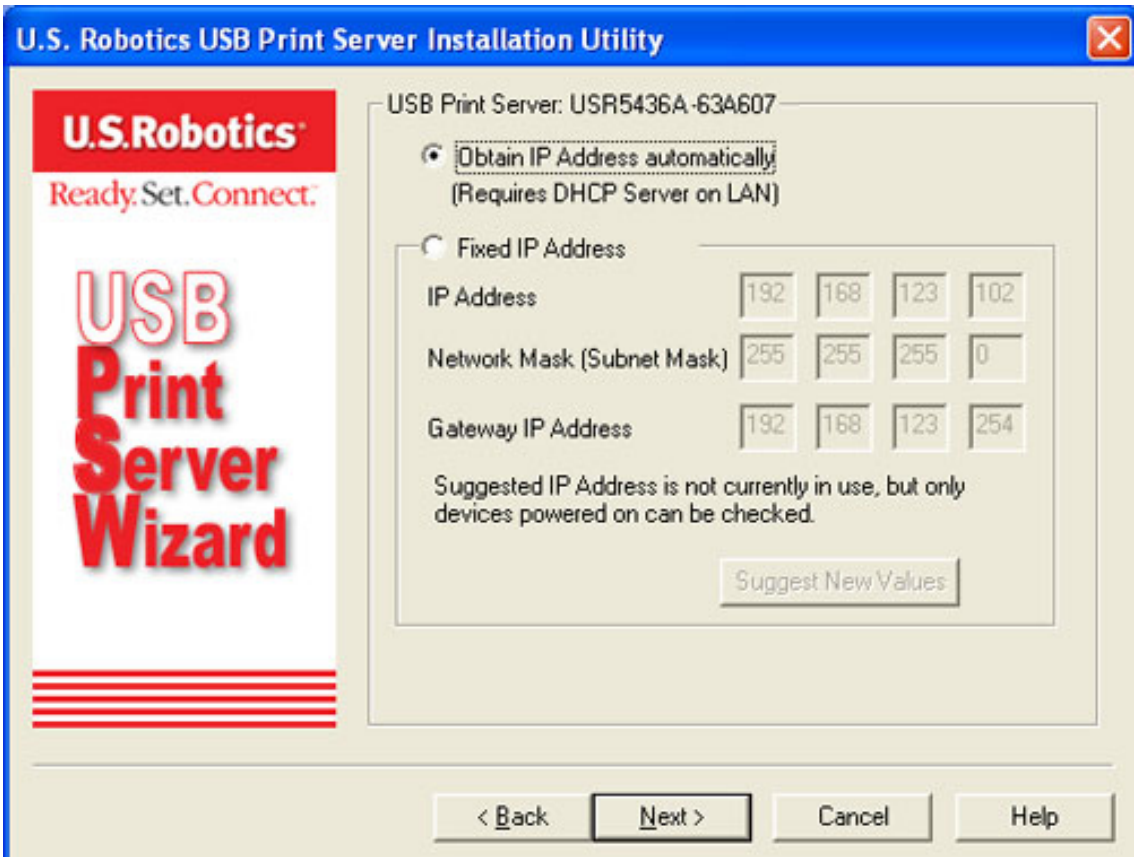


4. You can change the **Device Name**, if you want, and enter a **Domain Name**. When finished,

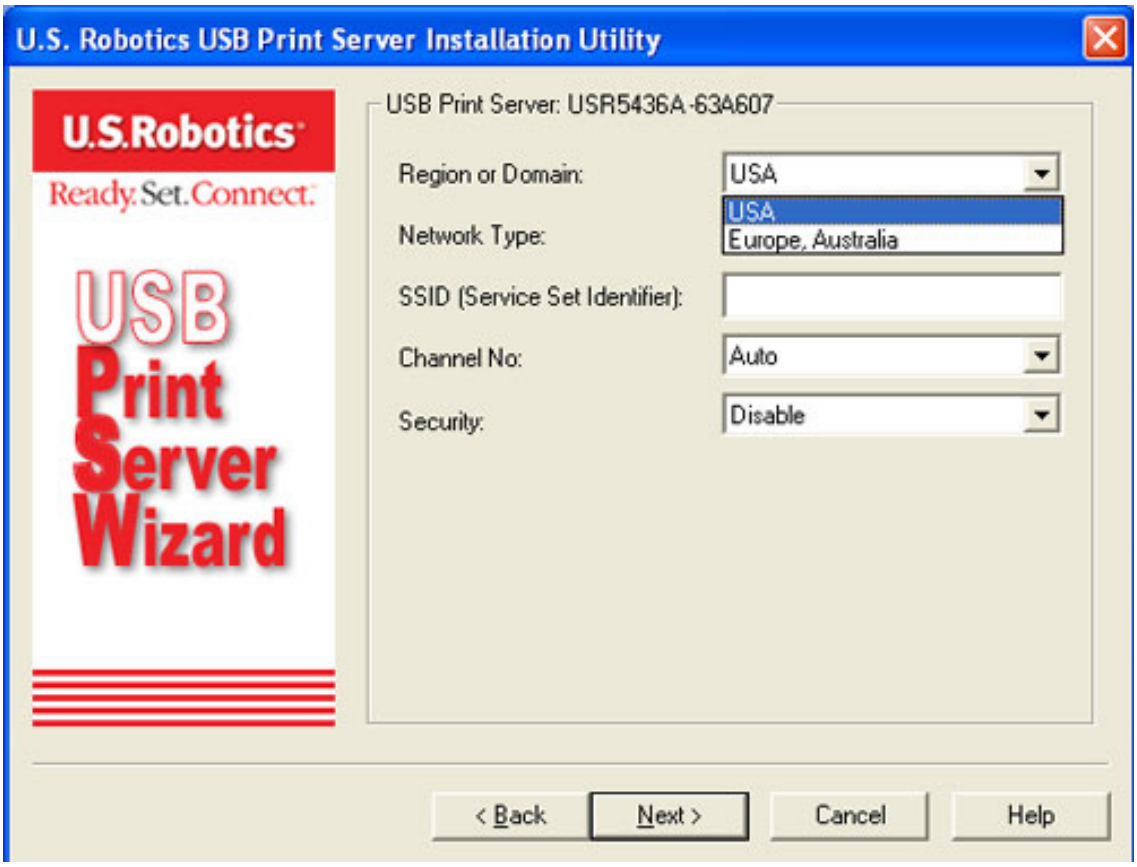
click **Next**.



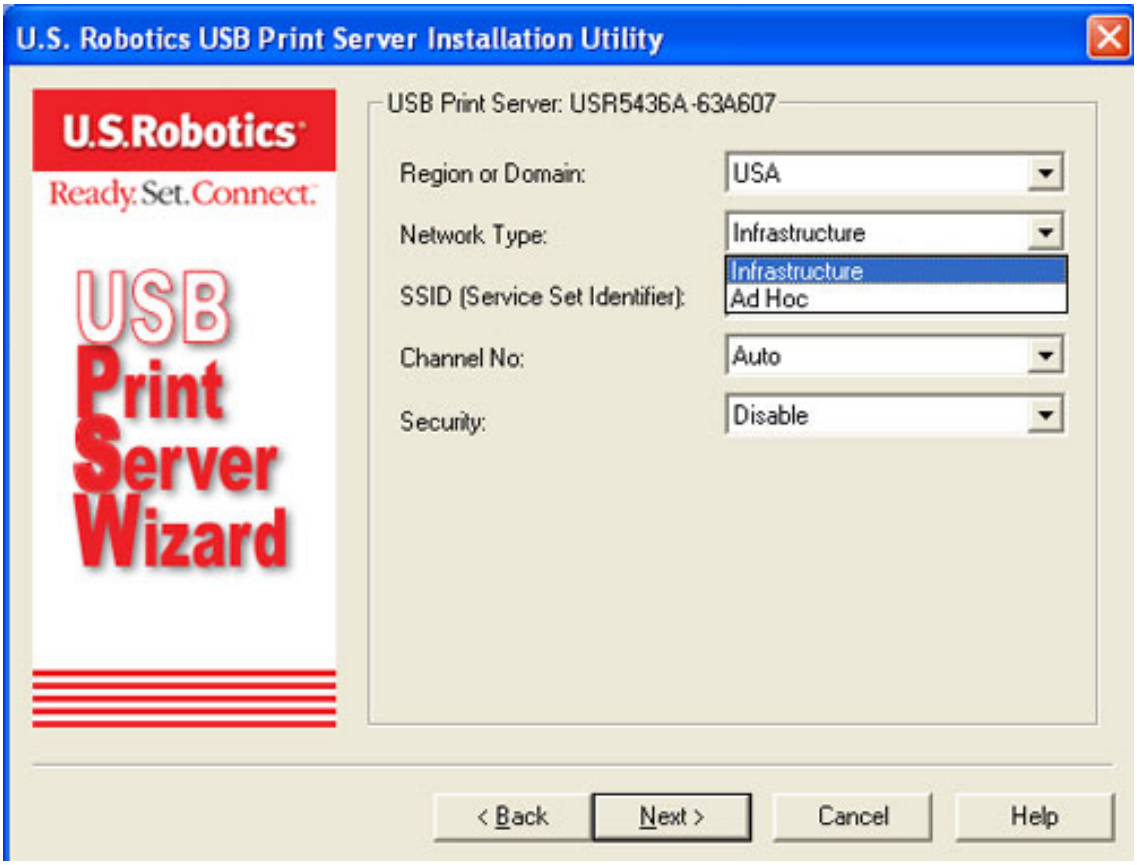
5. If you have connected the Wireless USB Print Server to a network device that has DHCP capabilities, you can select **Obtain IP Address automatically**. If your network device does not have DHCP capabilities, you can select **Fixed IP Address** and add the IP address information. When finished, click **Next**.



6. Next you can select the **Region or Domain** where you will be using the Wireless USB Print Server.

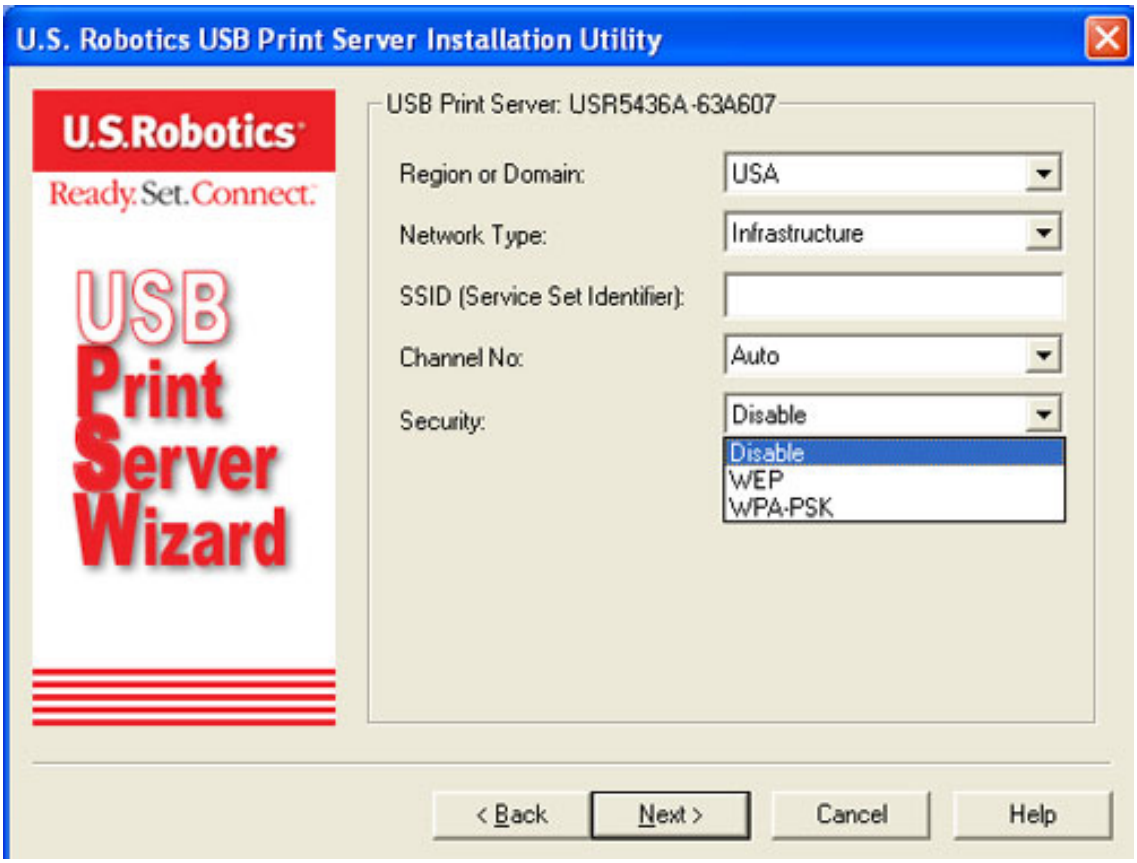


7. You can then select your **Network Type** as either **Infrastructure** or **Ad Hoc**, depending on if you are using a wireless router or access point or not in your wireless network.



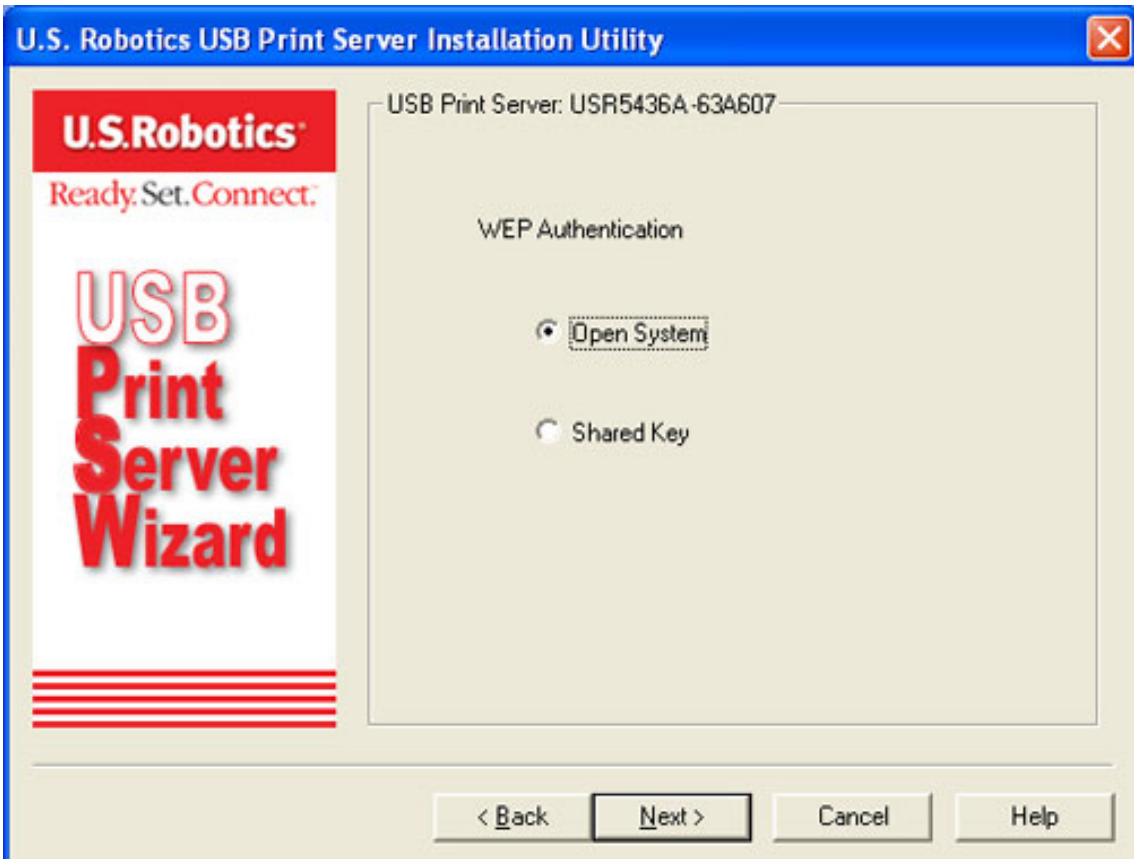
Note: The Wireless USB Print Server is initially set in **Infrastructure** mode, which is used to connect to an wireless router or access point. If you will be establishing a connection to other wireless clients without using a wireless router or access point, select **Ad-hoc** as the Network type.

8. In the **SSID** field, you should enter the SSID of the wireless router or access point to which you will be connecting the wireless print server. If you selected Ad Hoc for your Network Type, you can select a specific **Channel** on which to broadcast. If you selected Infrastructure, **Auto** is the only channel option. For **Security**, you can select either **Disable**, **WEP**, or **WPA-PSK**, depending on how you have your wireless network set up.

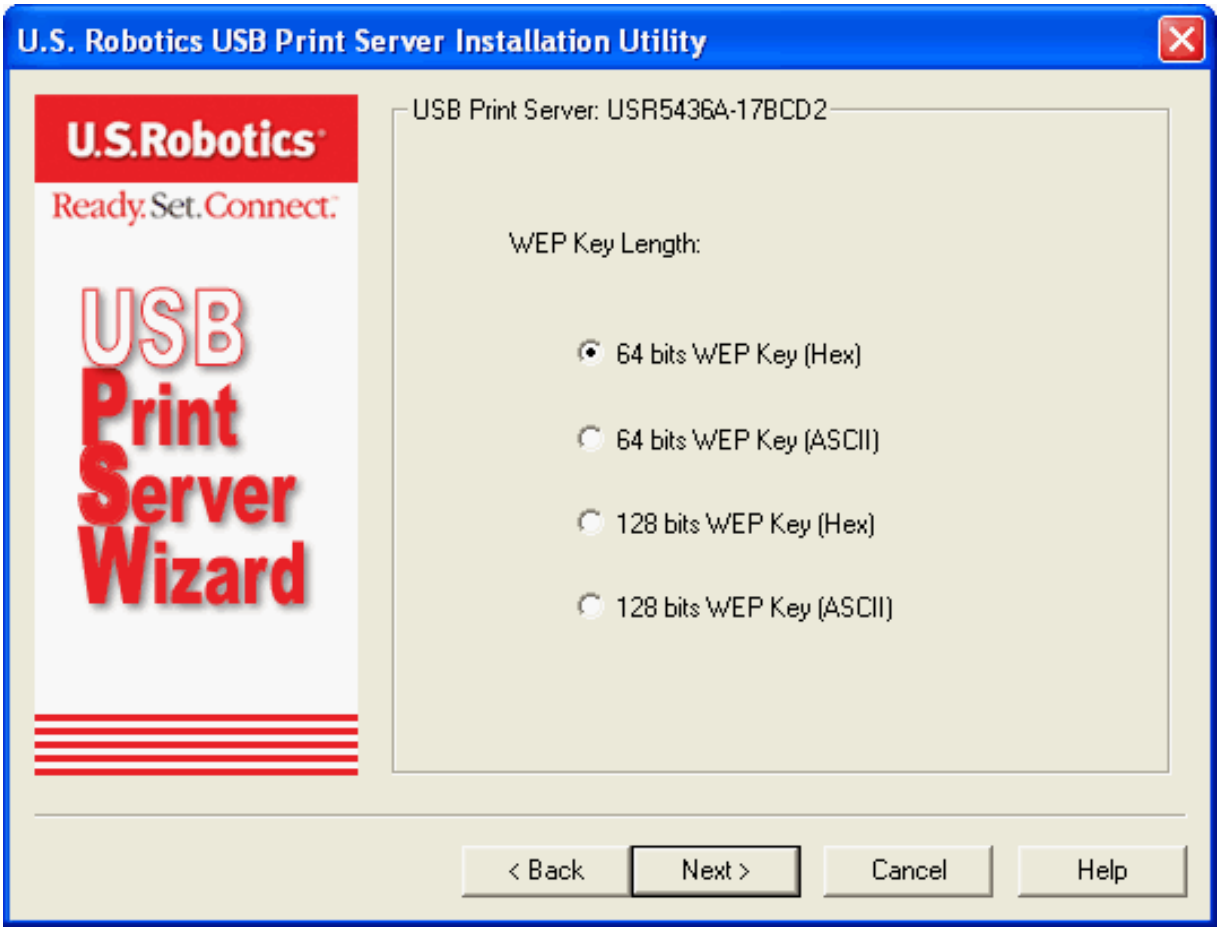


Note: The only security that the print server supports is WEP or WPA-PSK. You may need to modify the security settings of your wireless network accordingly.

A. If you select **WEP**, you will need to select either Open System or Shared Key for your Authentication and then click **Next**.



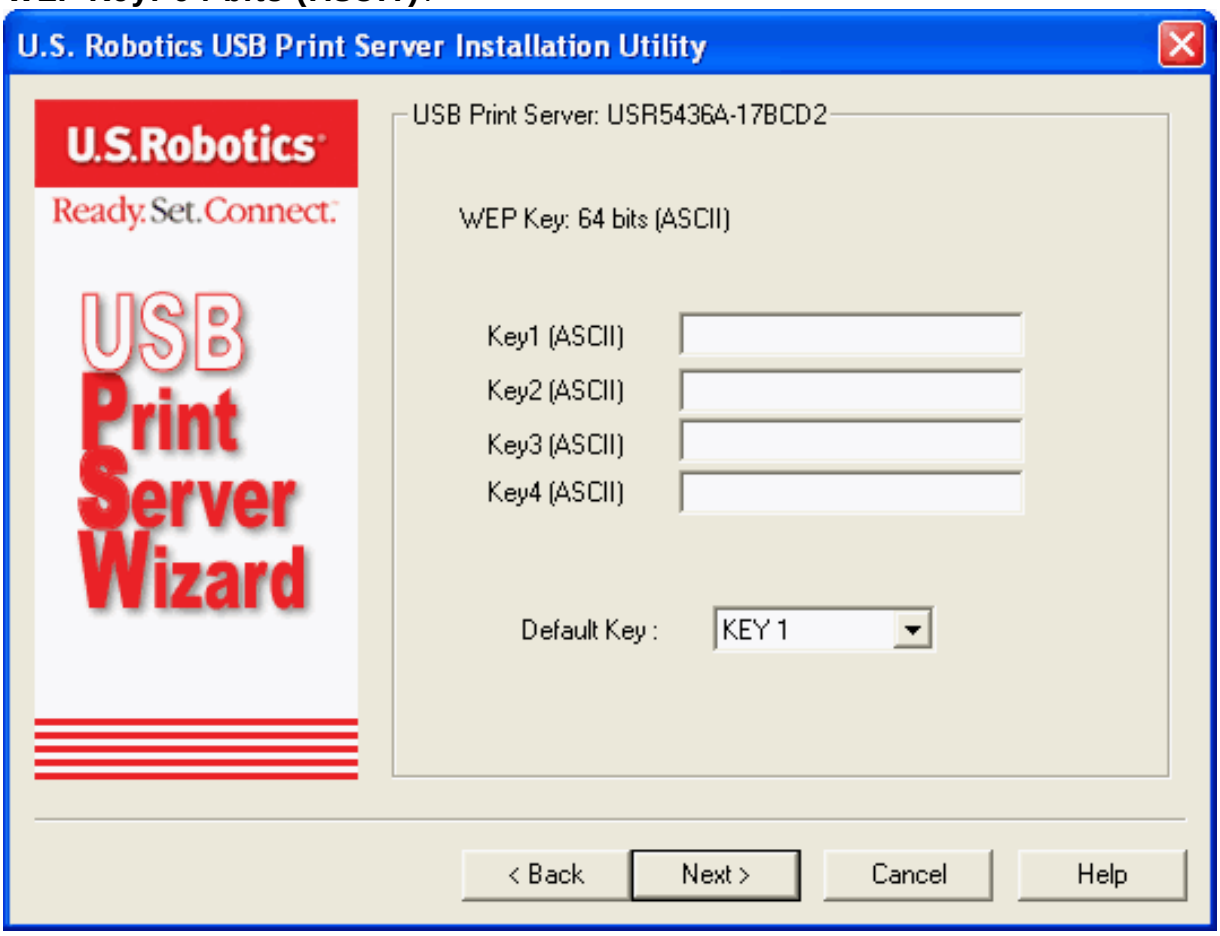
B. You will then need to select your **WEP Key Length**, either 64 bit Hex, 64 bits ASCII, 12 bits Hex, or 128 bits ASCII. Click **Next**.



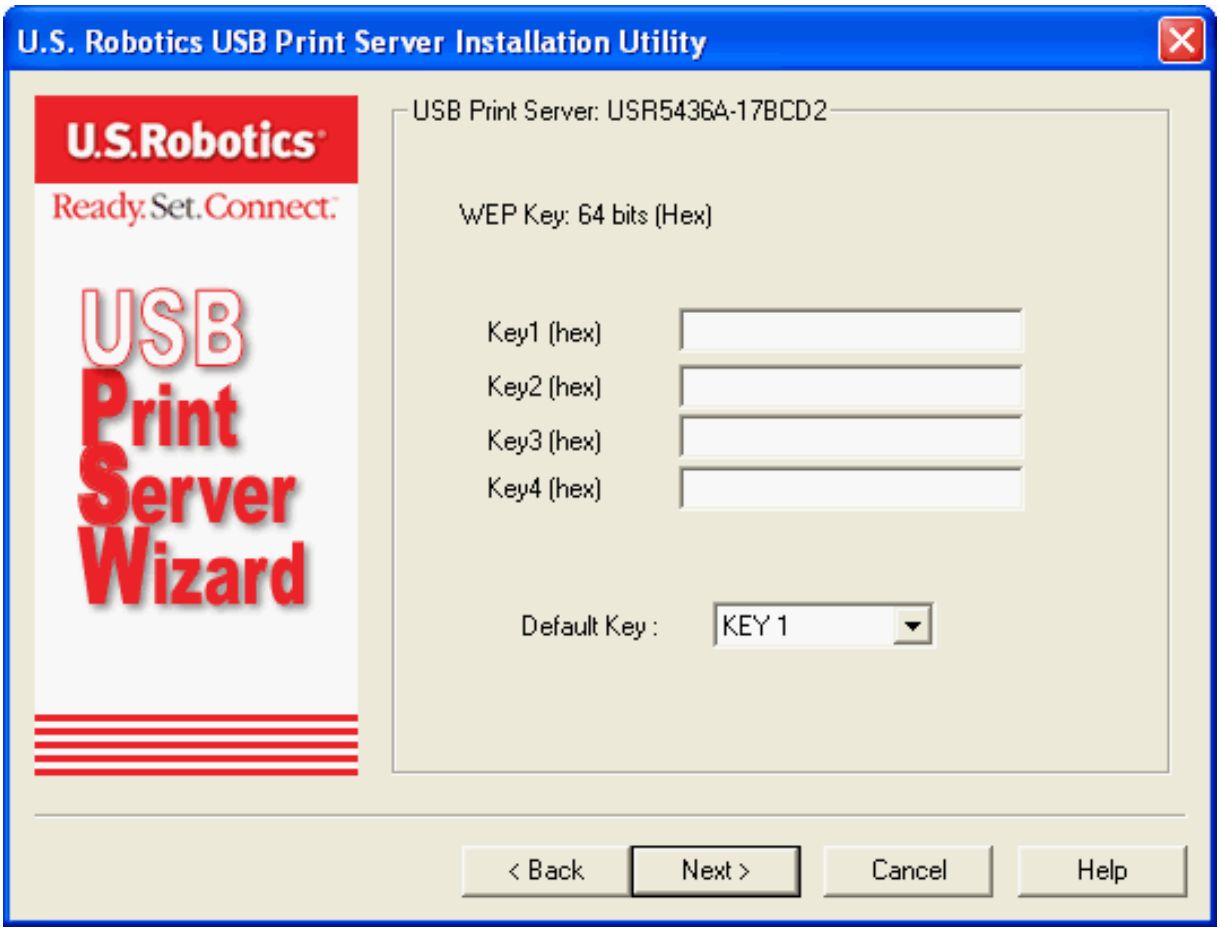
C. You will then need to enter your **Key** and select the **Default Key** number. Click **Next** when finished.

	Hex	ASCII
64-bit	10 characters	5 characters
128-bit	26 characters	13 characters

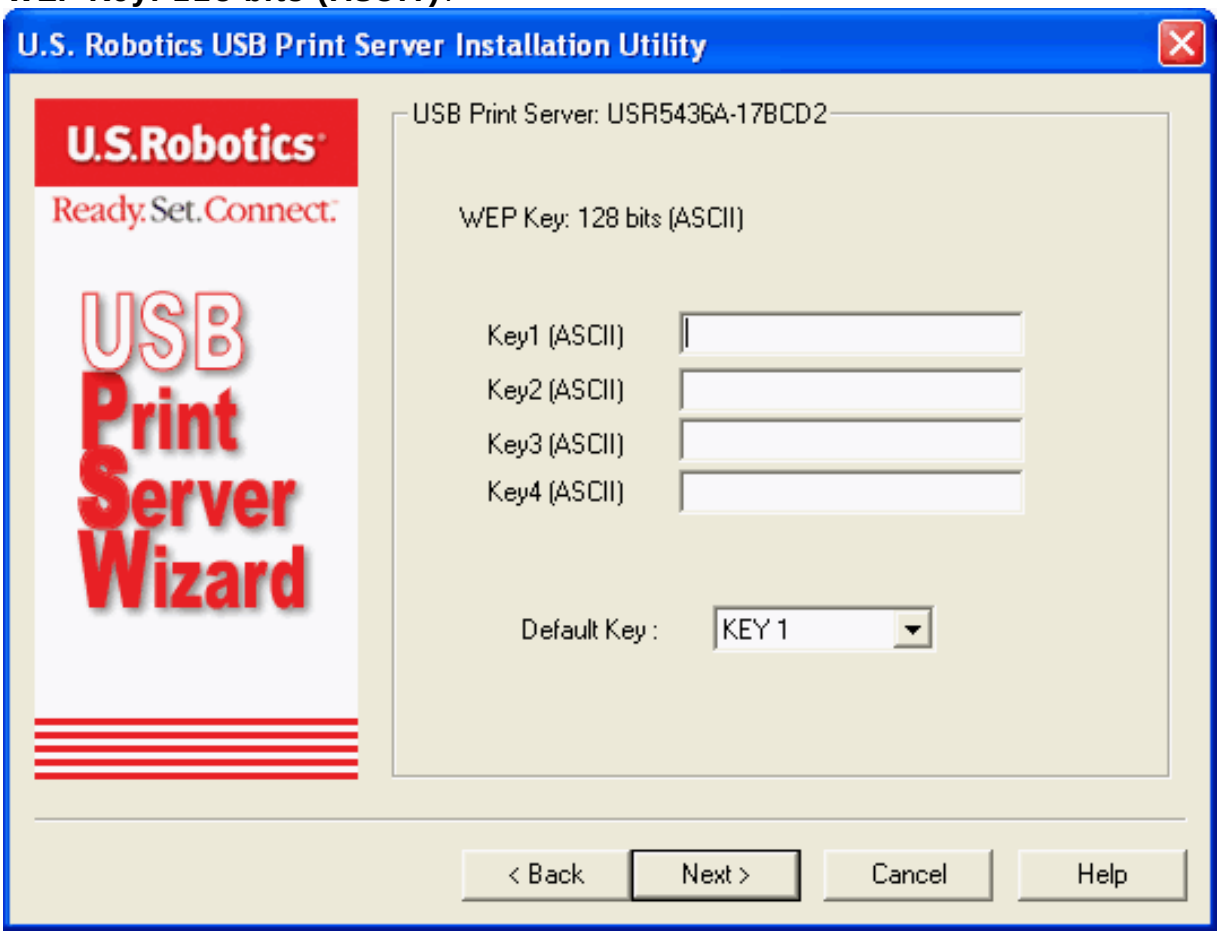
WEP Key: 64 bits (ASCII):



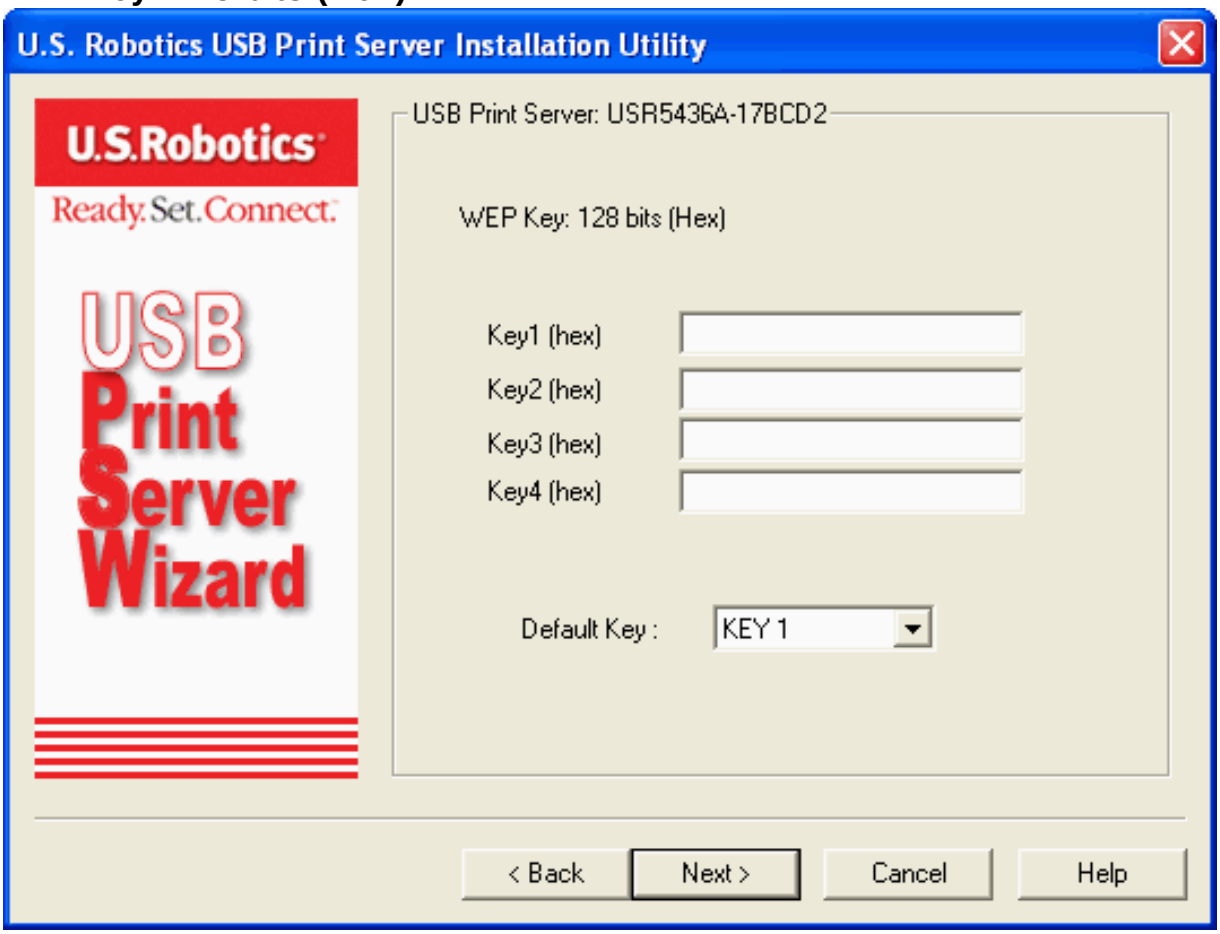
WEP Key: 64 bits (Hex):



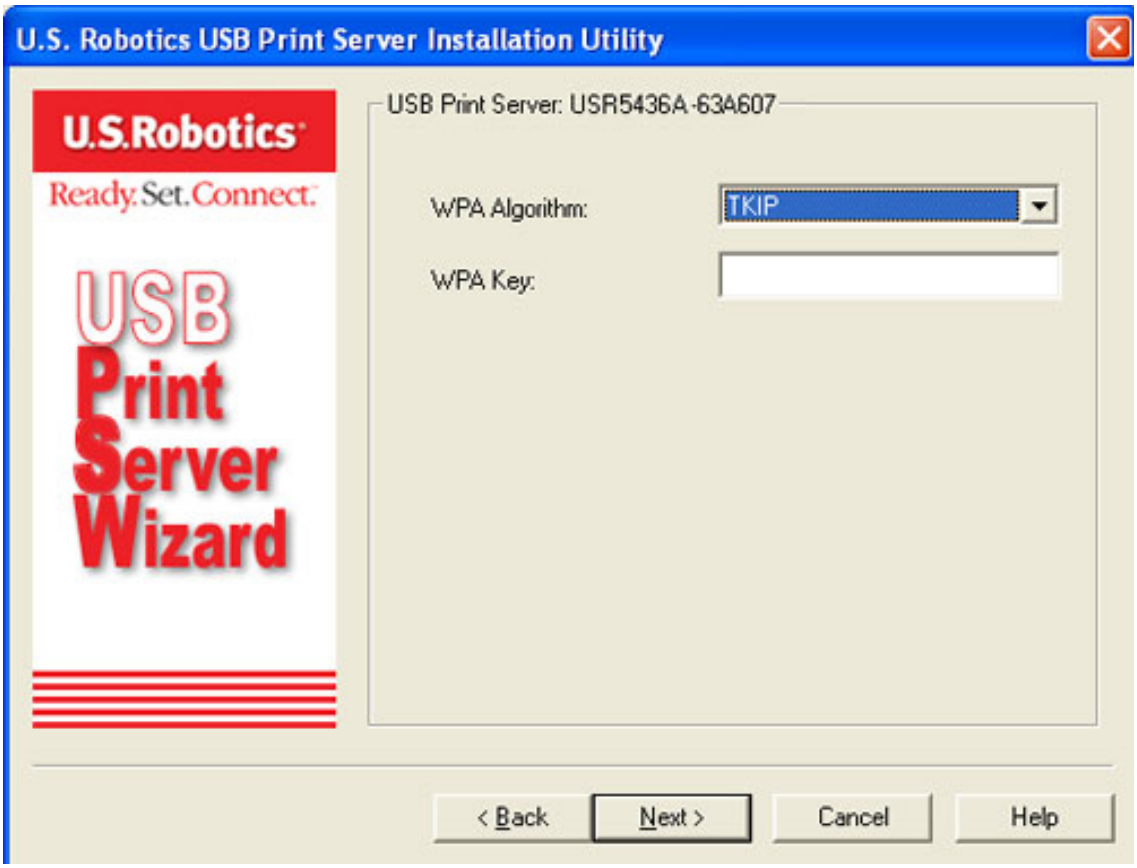
WEP Key: 128 bits (ASCII):



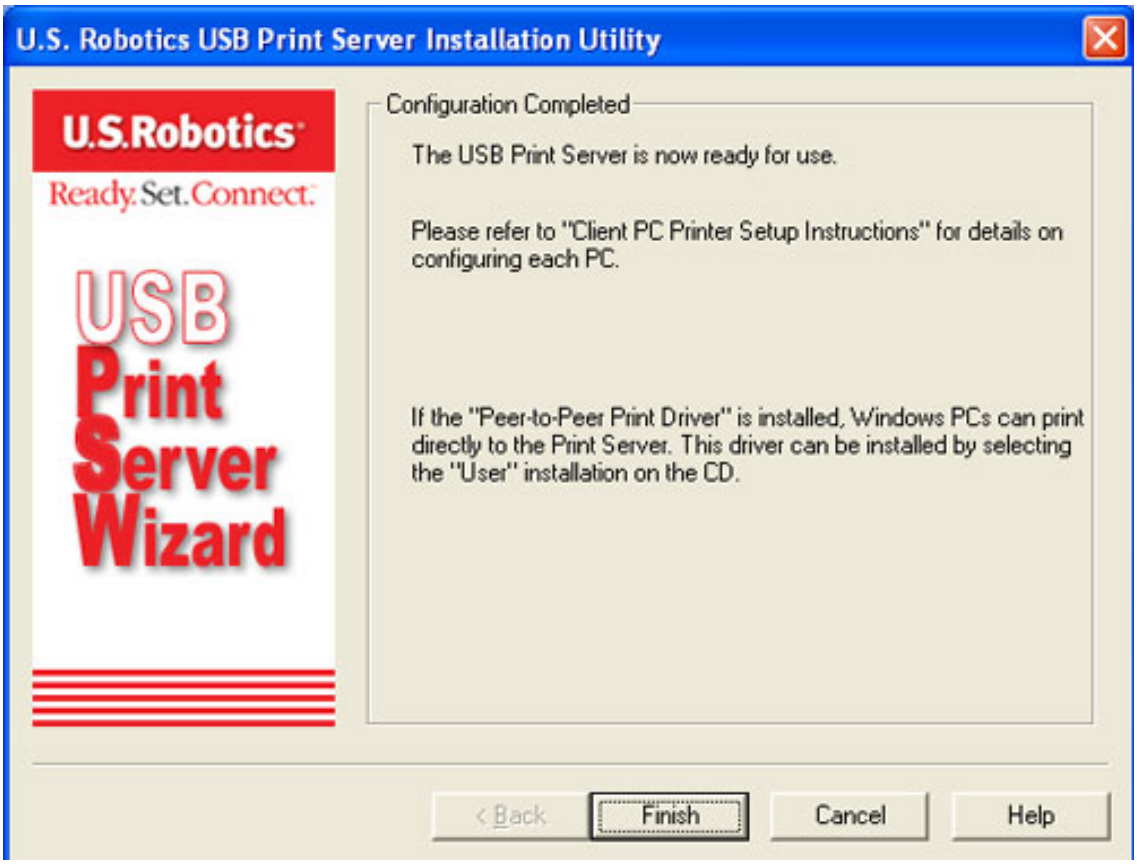
WEP Key: 128 bits (Hex):



D. If you select WPA-PSK, you will need to enter the **WPA Key** on the next screen. This Key should match what you already have in your wireless network.

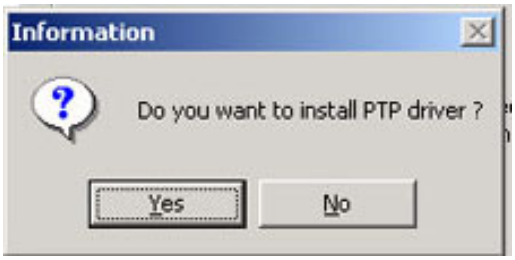


8. After selecting your Security type and entering any necessary information, your initial configuration is complete and you should click **Finish**.

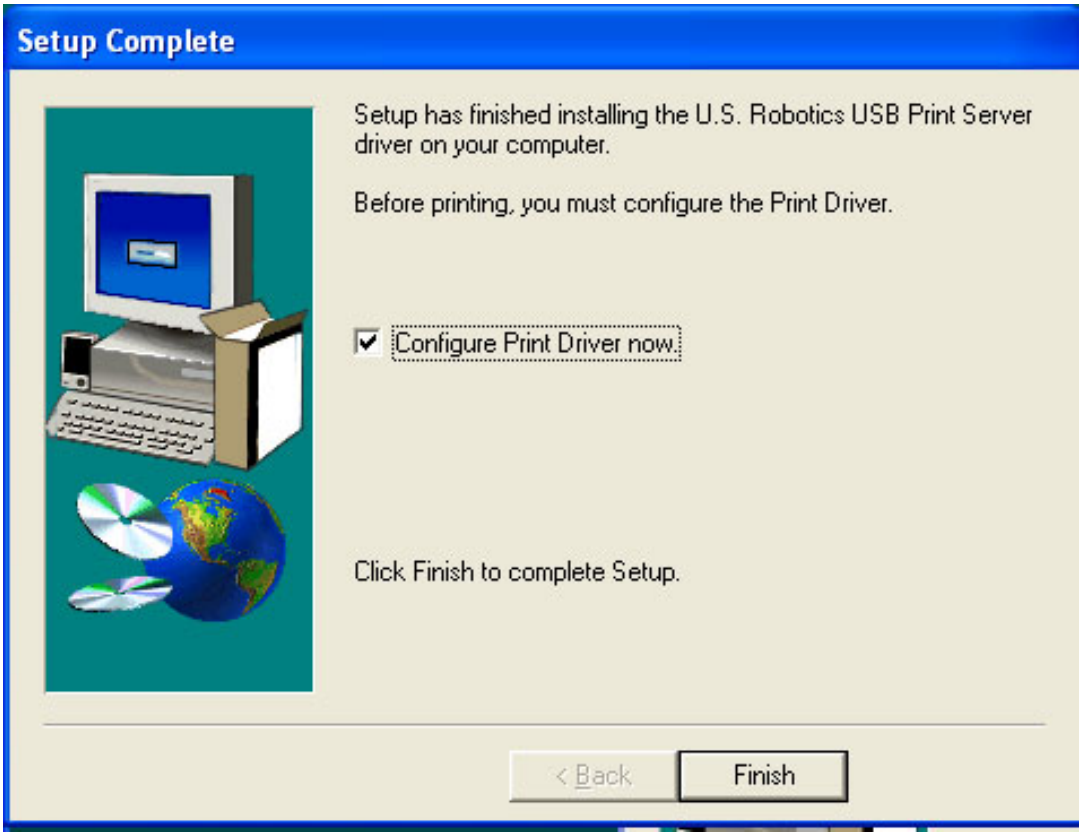


9. You will then be prompted to install the PTP (Peer-to-Peer) driver. Click **Yes** and follow the on-

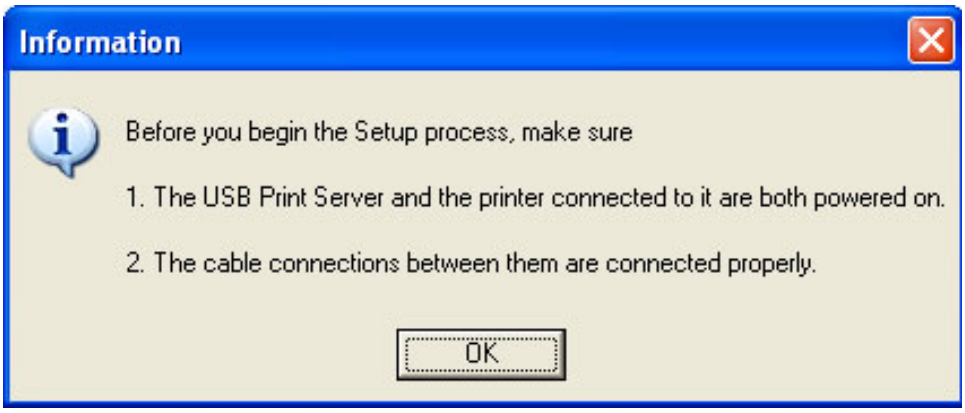
screen instructions.



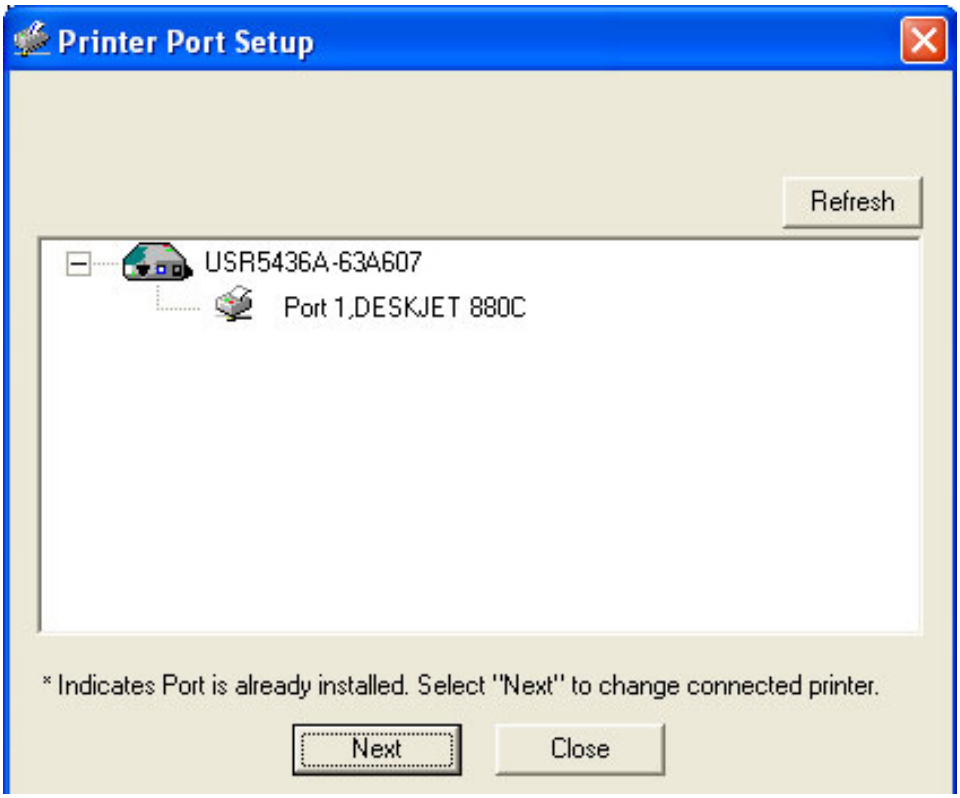
10. When that is completed, make sure the **Configure Print Driver now** checkbox is selected and click **Finish**.



11. Click **OK** in the Information screen that appears. It may be necessary to minimize the Print Server Utility screen in order to see the Information screen.

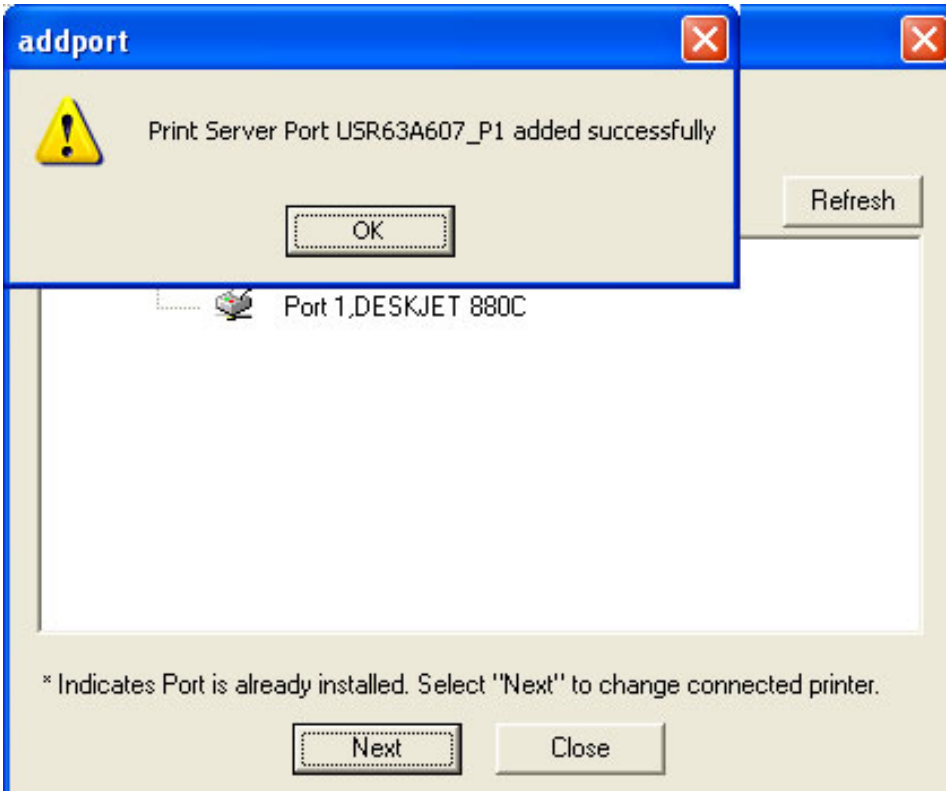


12. In the Printer Port Setup, select the port and click **Next**.

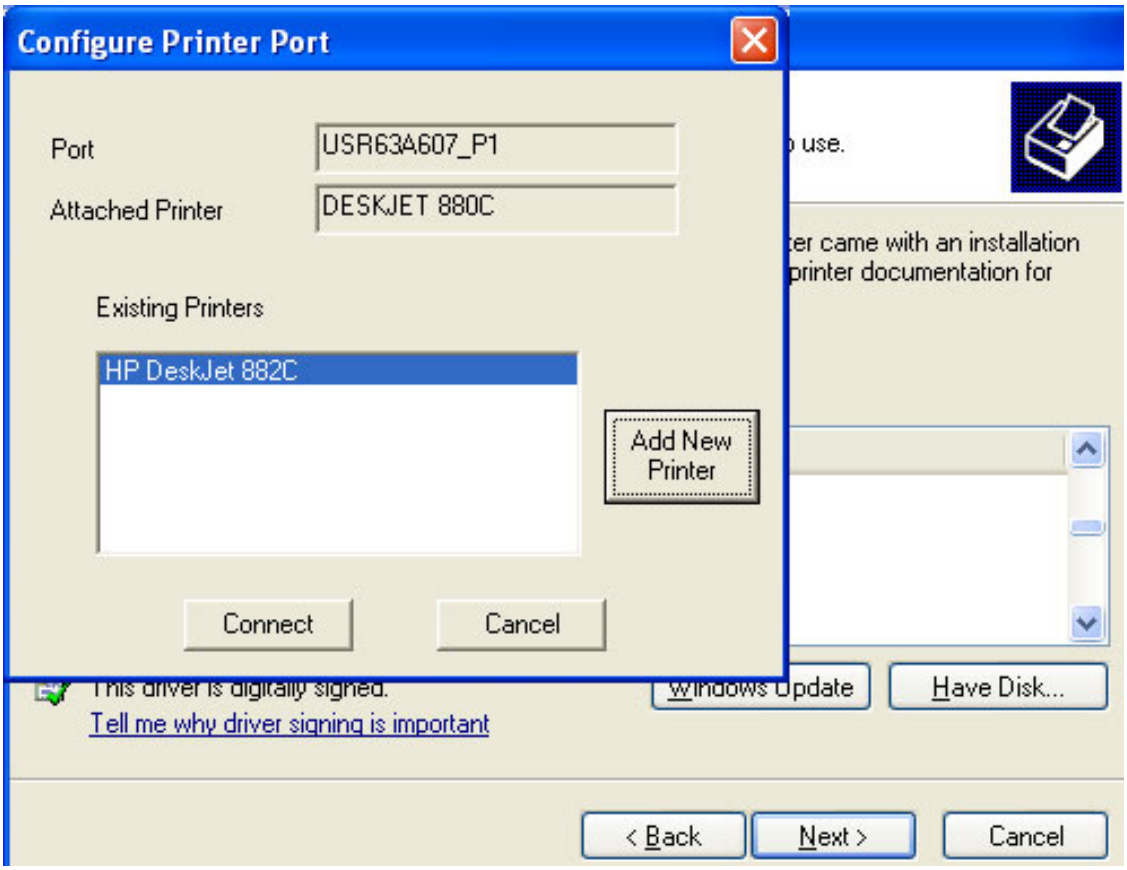


If you do not see the printer, click **Refresh** until the port name appears.

13. Click **OK** on the message that appears.



14. Select the printer from the **Existing Printers** list.

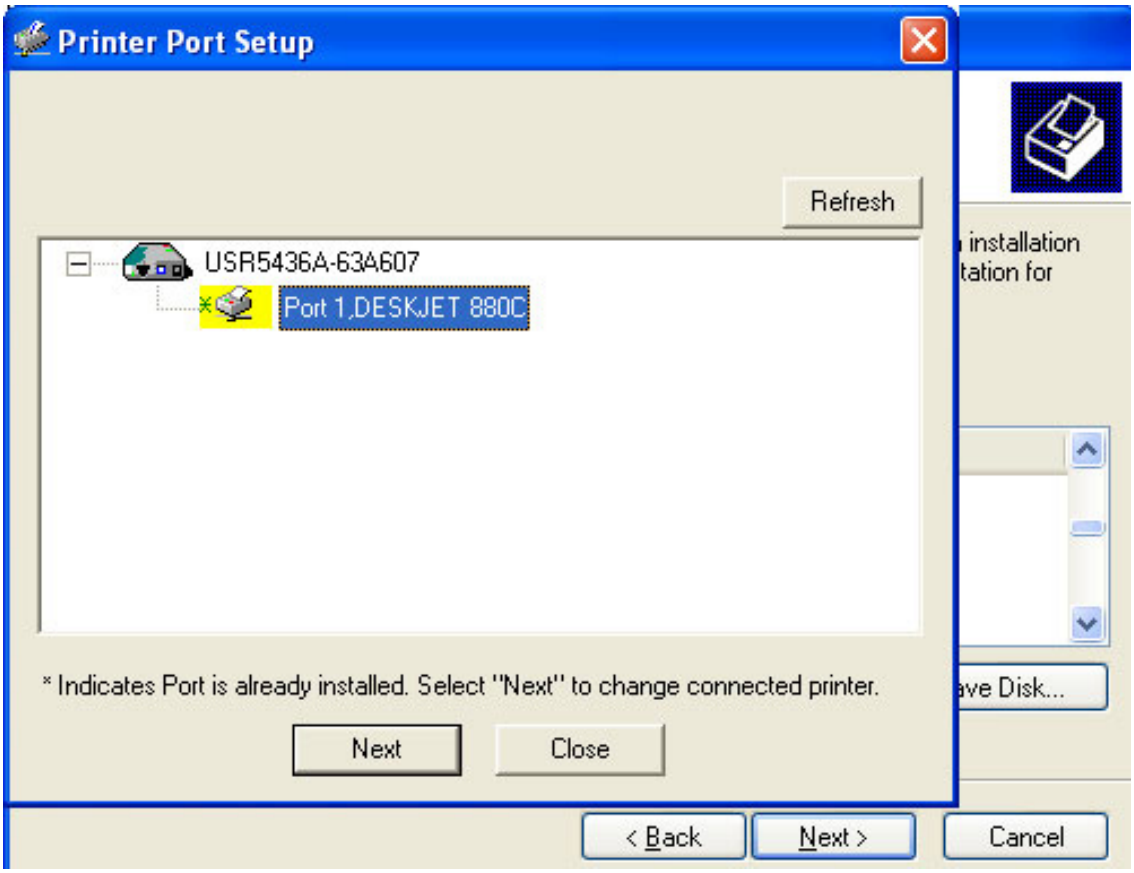


If the printer doesn't appear, click **Add New Printer** and follow the onscreen instructions.

15. Click **Connect**.

    If you do not see an asterisk next to the port name in the Printer Port Setup screen, click **Refresh**. If it still doesn't appear, see **Troubleshooting**.

16. Click **Close**.



Step Three: Print a Test Page.

1. Windows XP, 2000, and NT Users:
    - Click Windows **Start** > **Printers and Faxes**.

   Windows Me, 98, and 95 Users:

    A. Click Windows **Start** > **Settings** > **Control Panel**.

    B. Within Control Panel, click **Printers and Faxes**.
2. Right-click the printer you just installed and select **Properties**.
3. Click **Print Test Page**. Your printer should successfully print a test page.

Step Four: Setup the Print Server for Wireless Access

You can now access the wireless functions of the Wireless USB Print Server.

1. Disconnect the Ethernet cable and the power adapter from the Wireless USB Print Server.

2. Reconnect the power adapter to restart the print server. The print server should now establish a wireless connection to your wireless router or access point.

3. Repeat the instructions from **Step Three: Print a Test Page**. If you are able to print, your wireless connection is working correctly. If you are not able to print the test page, there is a problem with your wireless connection, see **Troubleshooting**.

Step Five: Connect Clients to the Wireless USB Print Server

To connect additional client computers to the printer, you will need to **perform the client installation** on each computer.

To install the management tools for the Wireless USB Print server, you need to perform an **Administrator** installation.

Congratulations! You have successfully completed the installation procedure. Please register your Wireless USB Print Server at **www.usr.com/productreg**.

To print out a diagnostic page with the setting information for the Wireless USB Print Server, press the **RESET** button once.

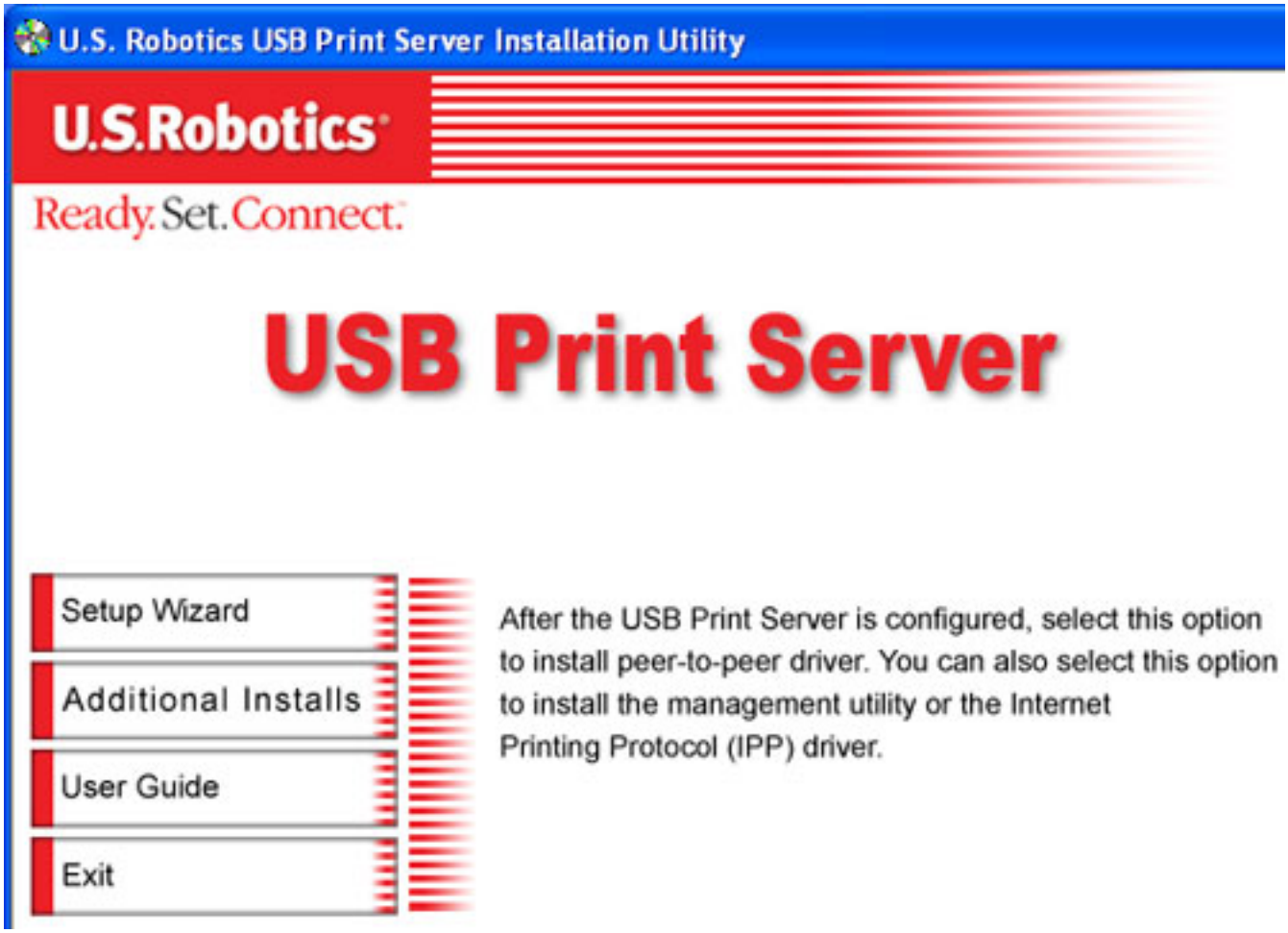
Wireless USB Print Server User Guide

USRobotics

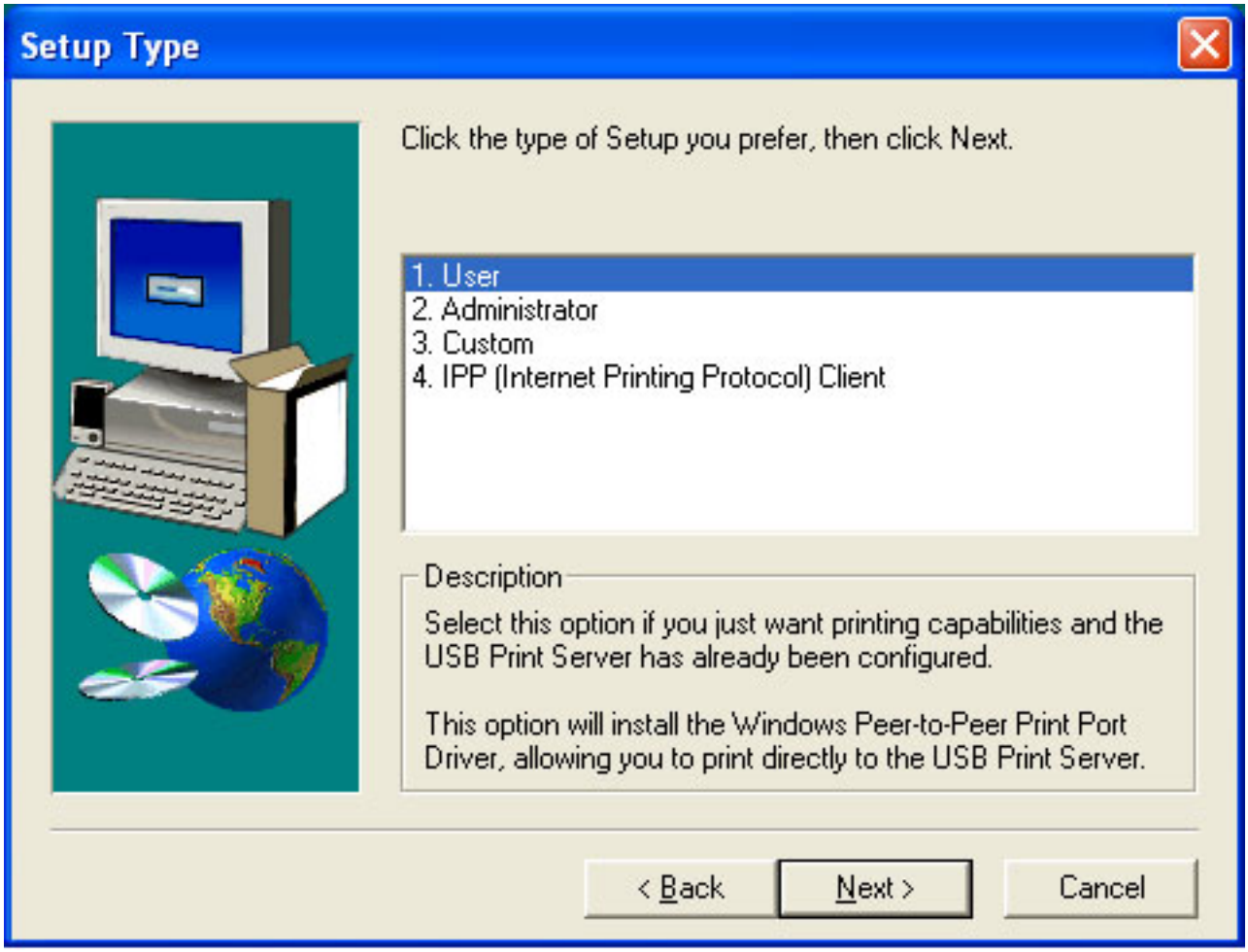
Before performing client configuration, the Wireless USB Print Server must be installed on your LAN, and configured as described in the **Wireless USB Print Server Installation** section. Both the Wireless USB Print Server and the attached printer must be powered ON.

Note: You may need the Installation CD-ROM that came with your printer.

1. Insert the U.S. Robotics Installation CD-ROM.
2. Click **Additional Installs** and then click **Next**.



3. You will need to select the type of user that this computer will be: **User**, **Administrator**, **Custom**, or **IPP Client**.

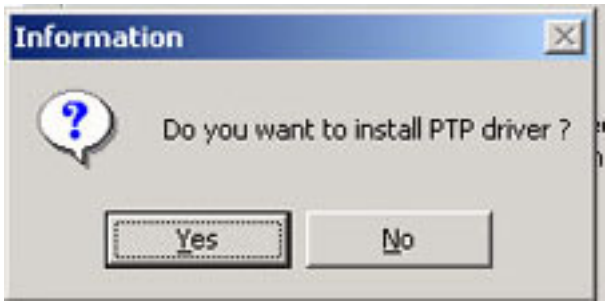


2. Follow the on-screen instructions to complete the client installation.

User

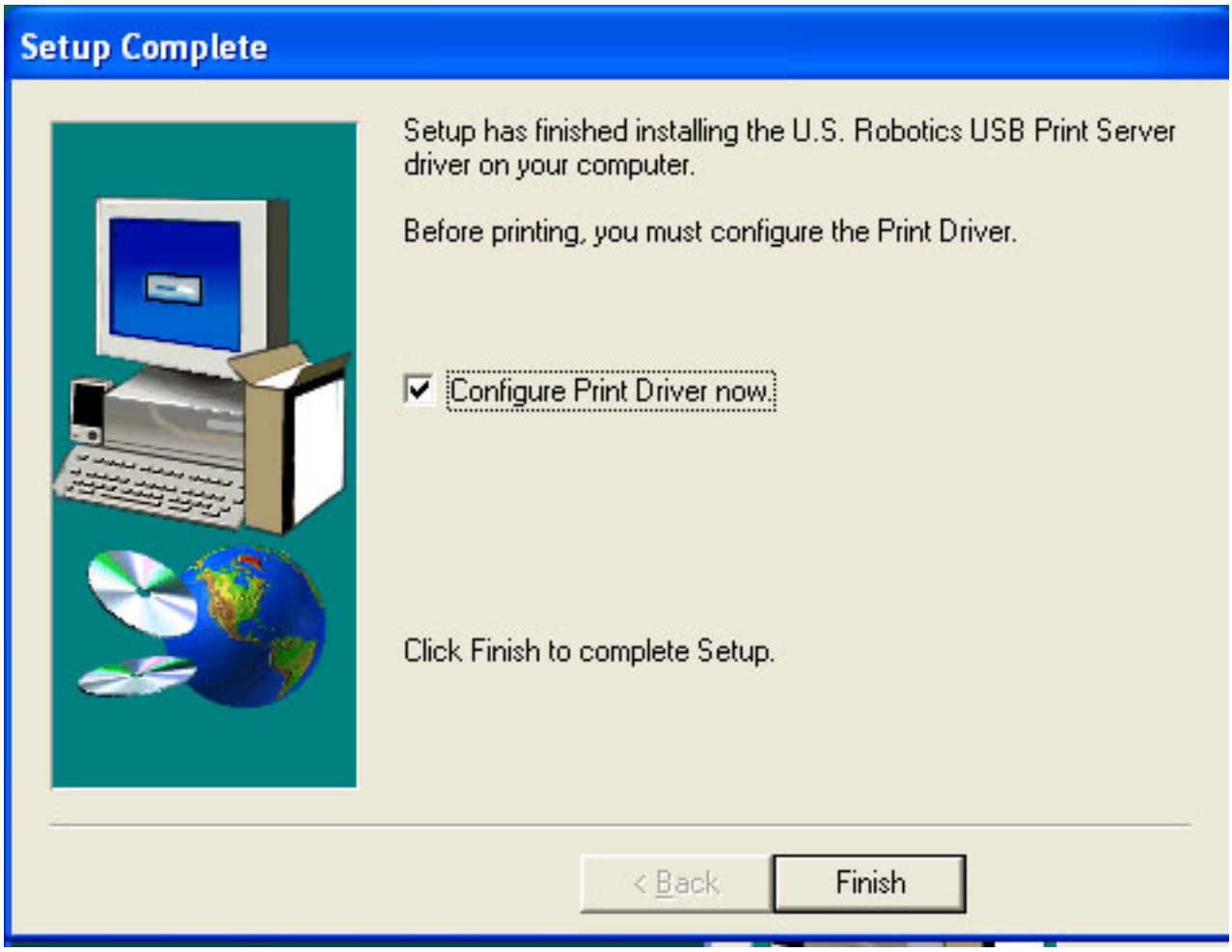
User is the most common option that the majority of network clients will want to choose. This should be selected if the Wireless USB Print Server has already been configured and you just need printing capabilities on this computer.

1. Click **User** and then click **Next** and follow the on-screen instructions.
2. You will then be prompted to install the PTP (Peer-to-Peer) driver. Click **Yes**.

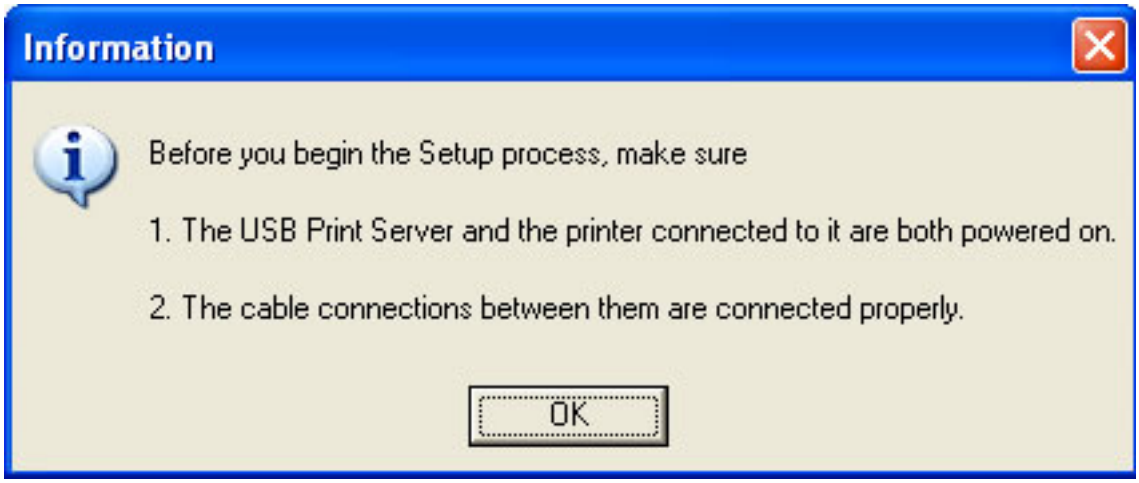


3. Follow the on-screen instructions to select the location and install the PTP (Peer-to-Peer) driver.

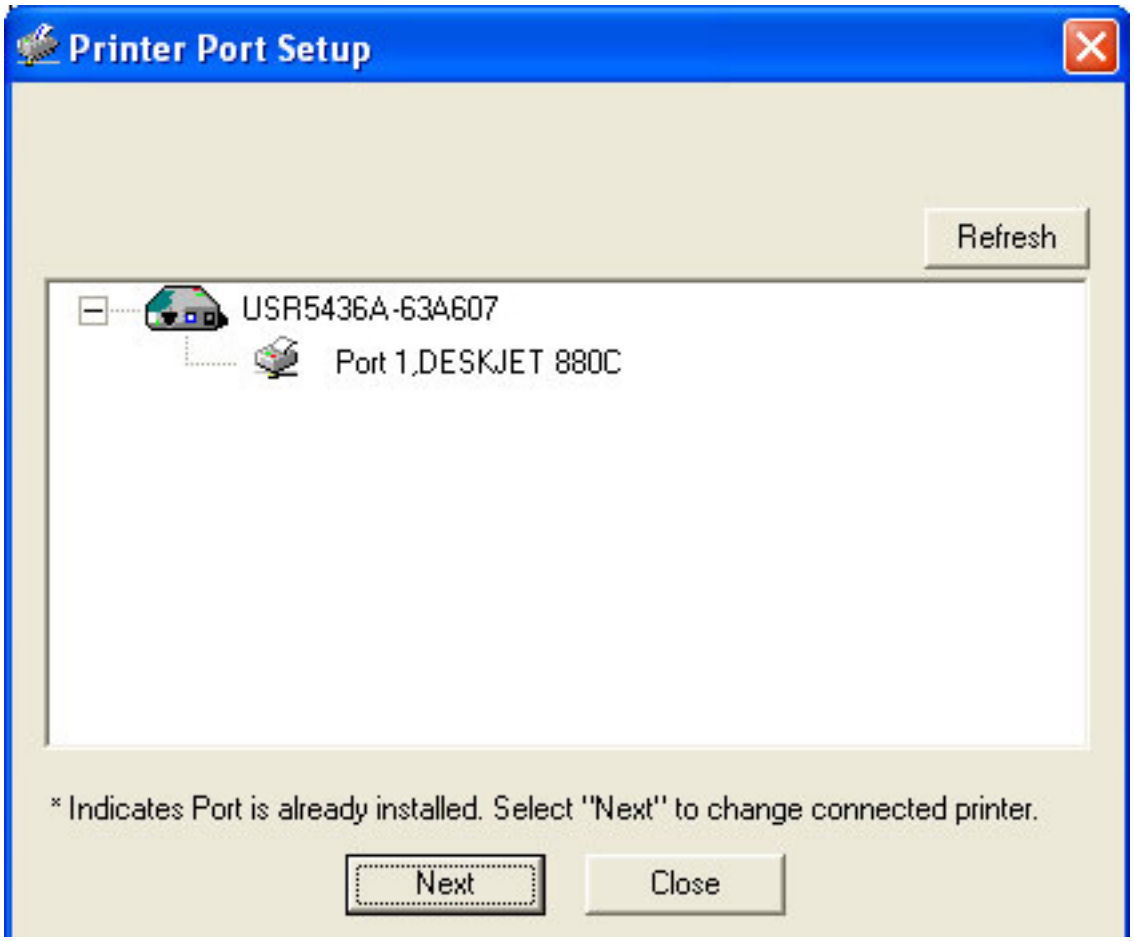
4. When that is completed, make sure the **Configure Print Driver now** checkbox is selected and click **Finish**.



5. Click **OK** in the Information screen that appears. It may be necessary to minimize the Print Server Utility screen in order to see the Information screen.

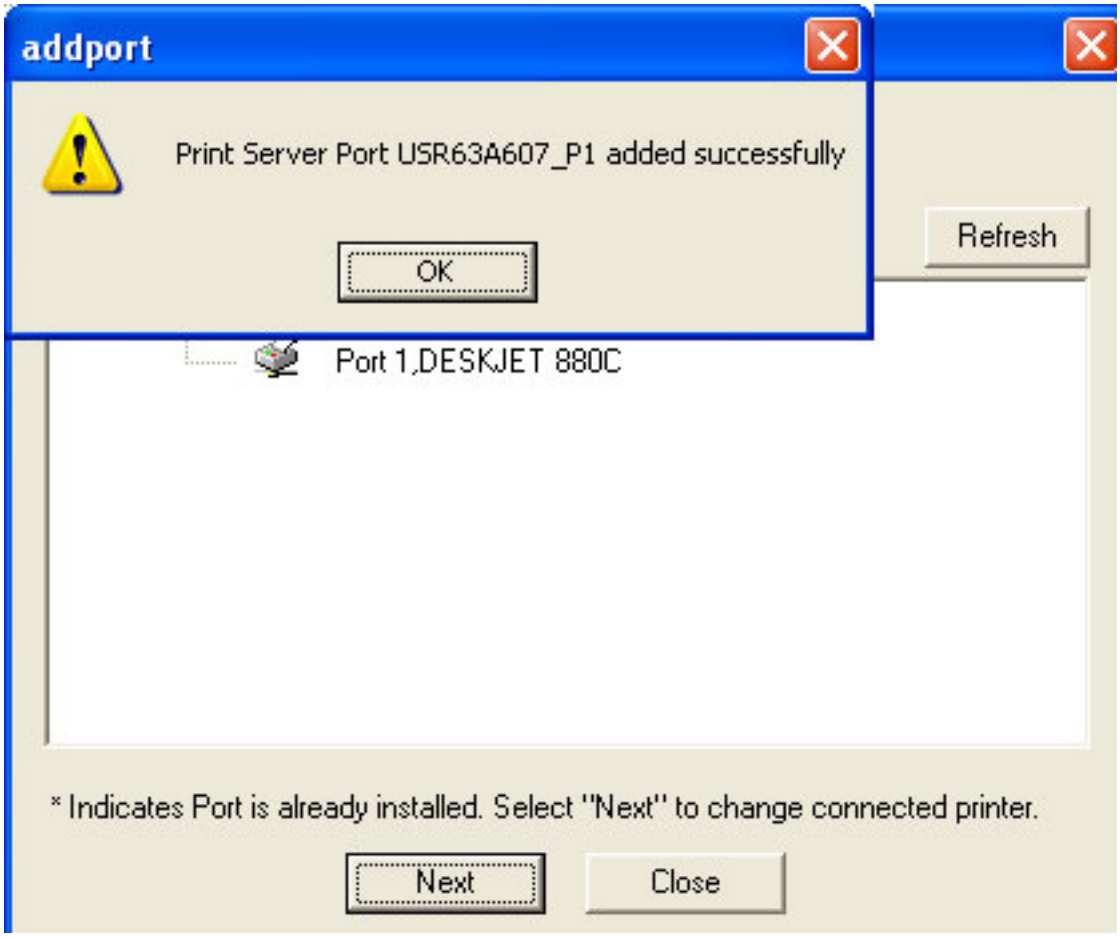


6. In the Printer Port Setup, select the port and click **Next**.

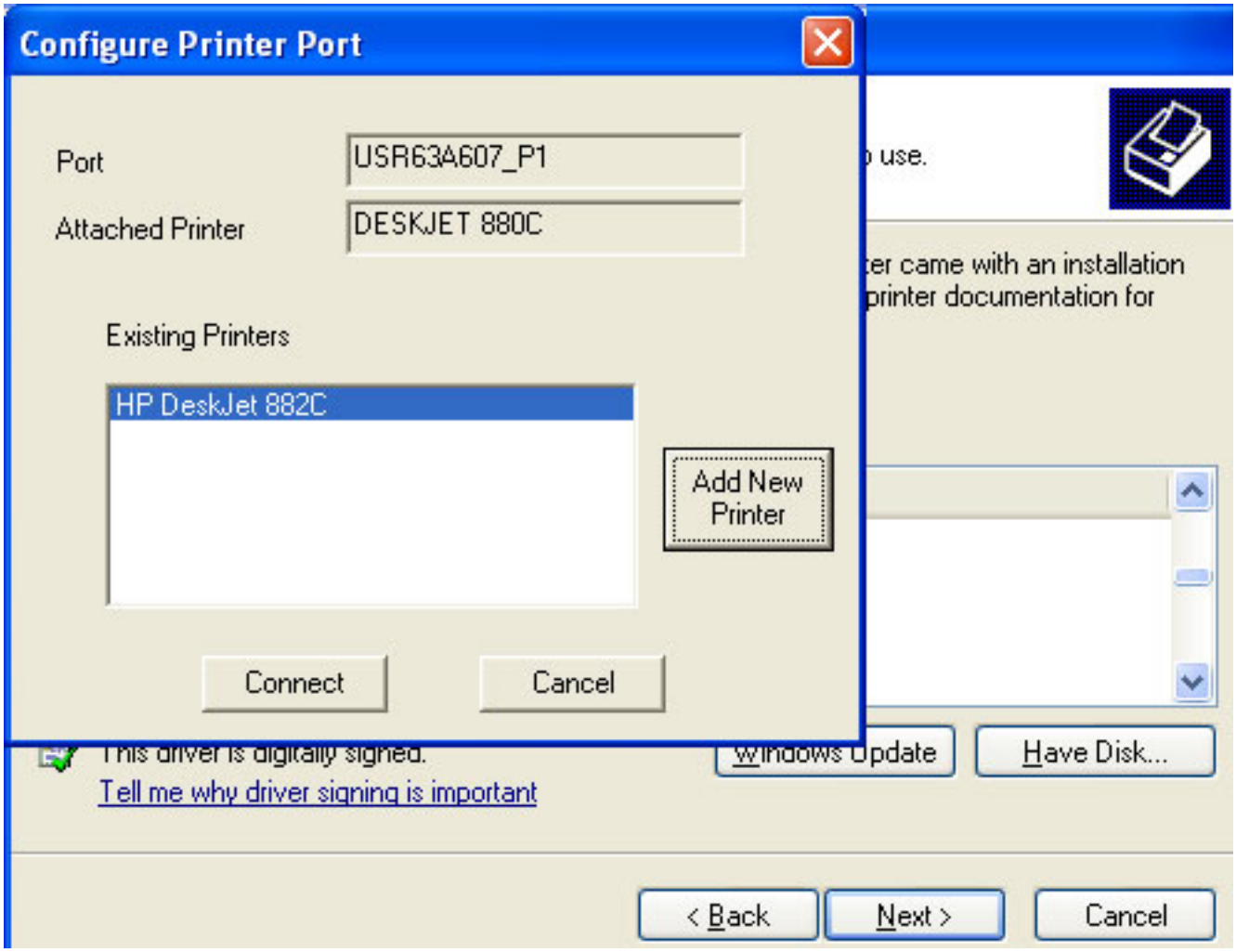


If you do not see the printer, click **Refresh** until the port name appears.

7. Click **OK** on the message that appears.



8. Select the printer from the Existing Printers list.

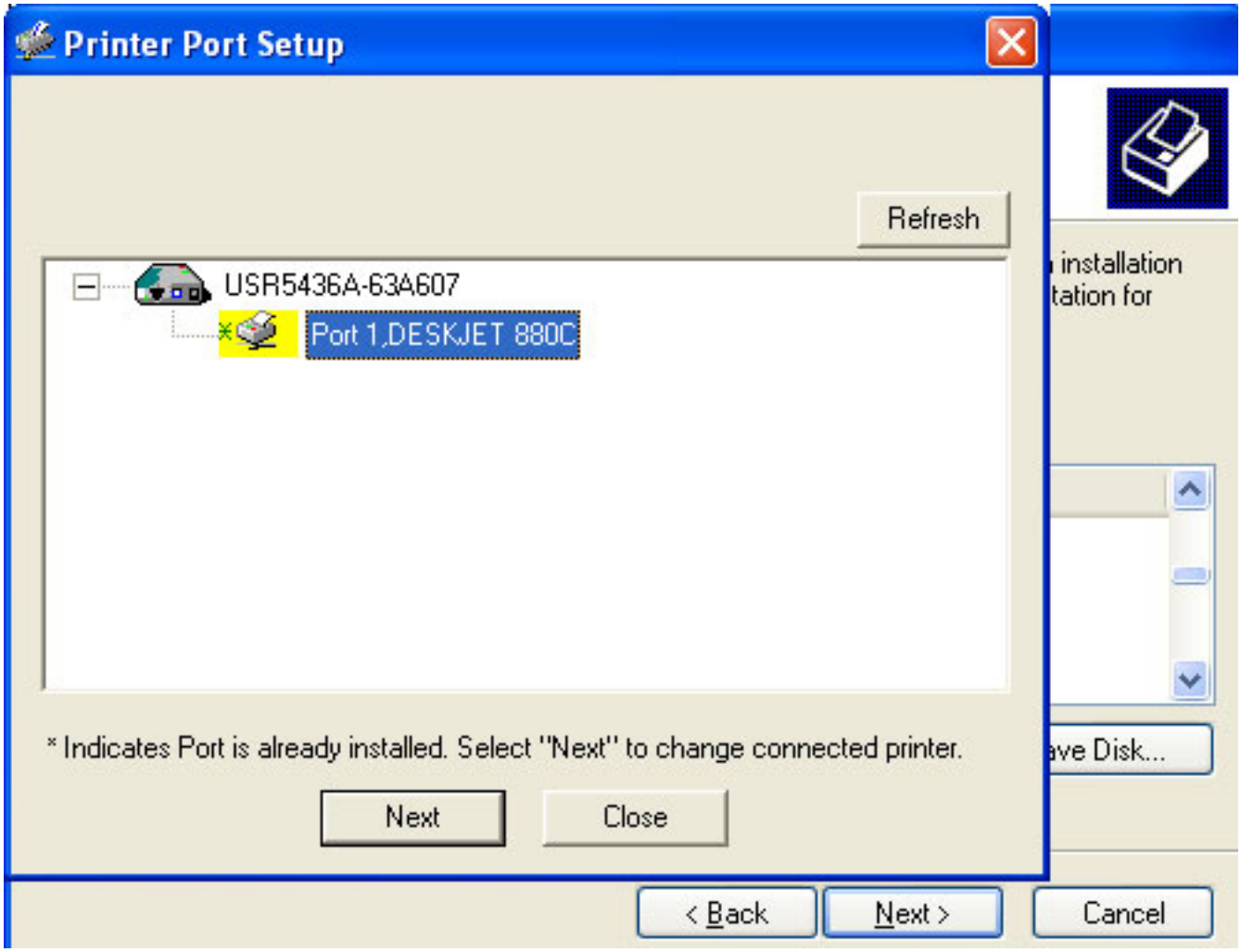


If the printer doesn't appear, click Add New Printer and follow the onscreen instructions.

9. Click **Connect**.

   If you do not see an asterisk next to the port name in the Printer Port Setup screen, click **Refresh**. If it still doesn't appear, see **Troubleshooting**.

10. Click **Close**.



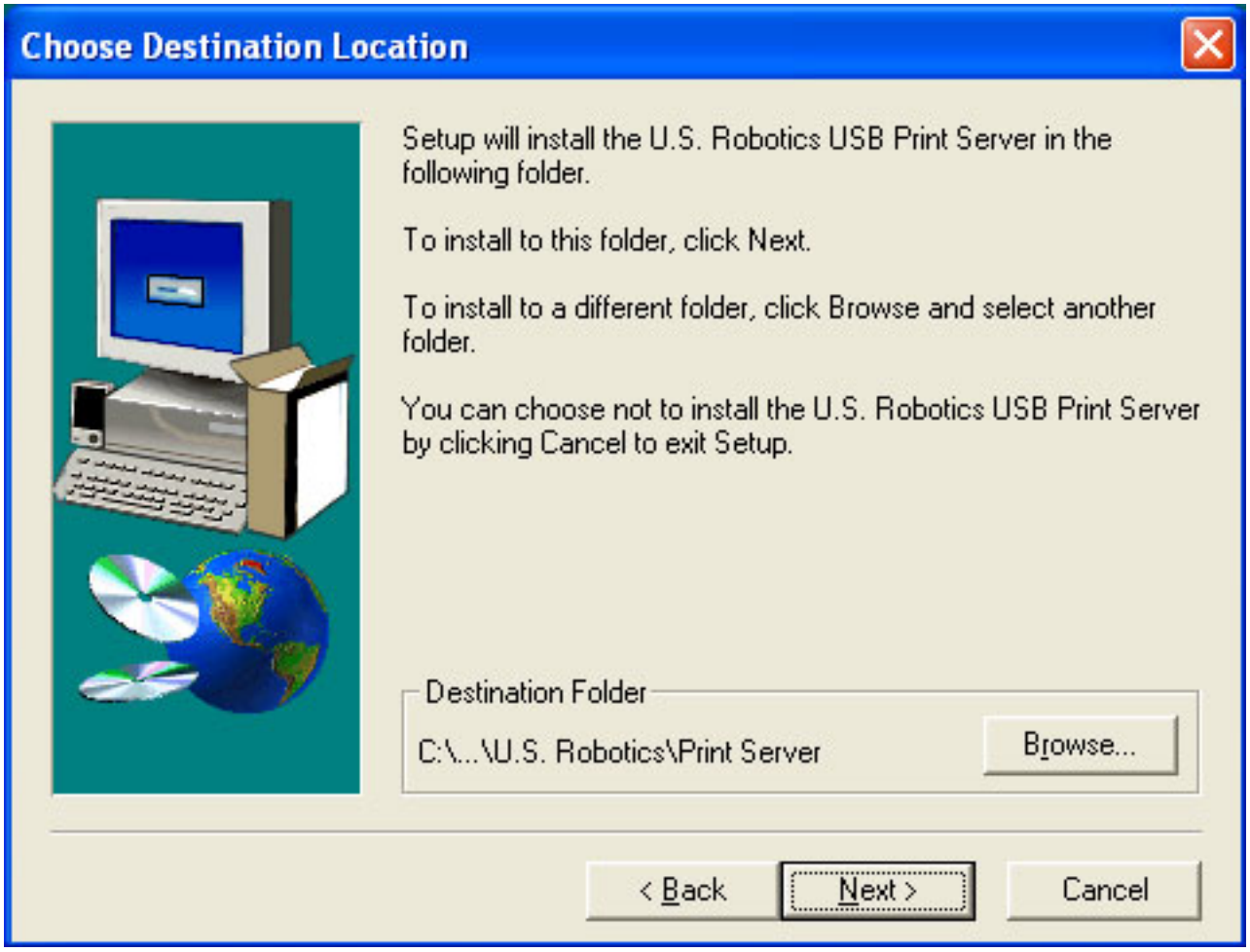
11. Repeat this step on each computer.

You will now be able to use your USB printer from this computer. To validate your setup, you can **print a test page**.

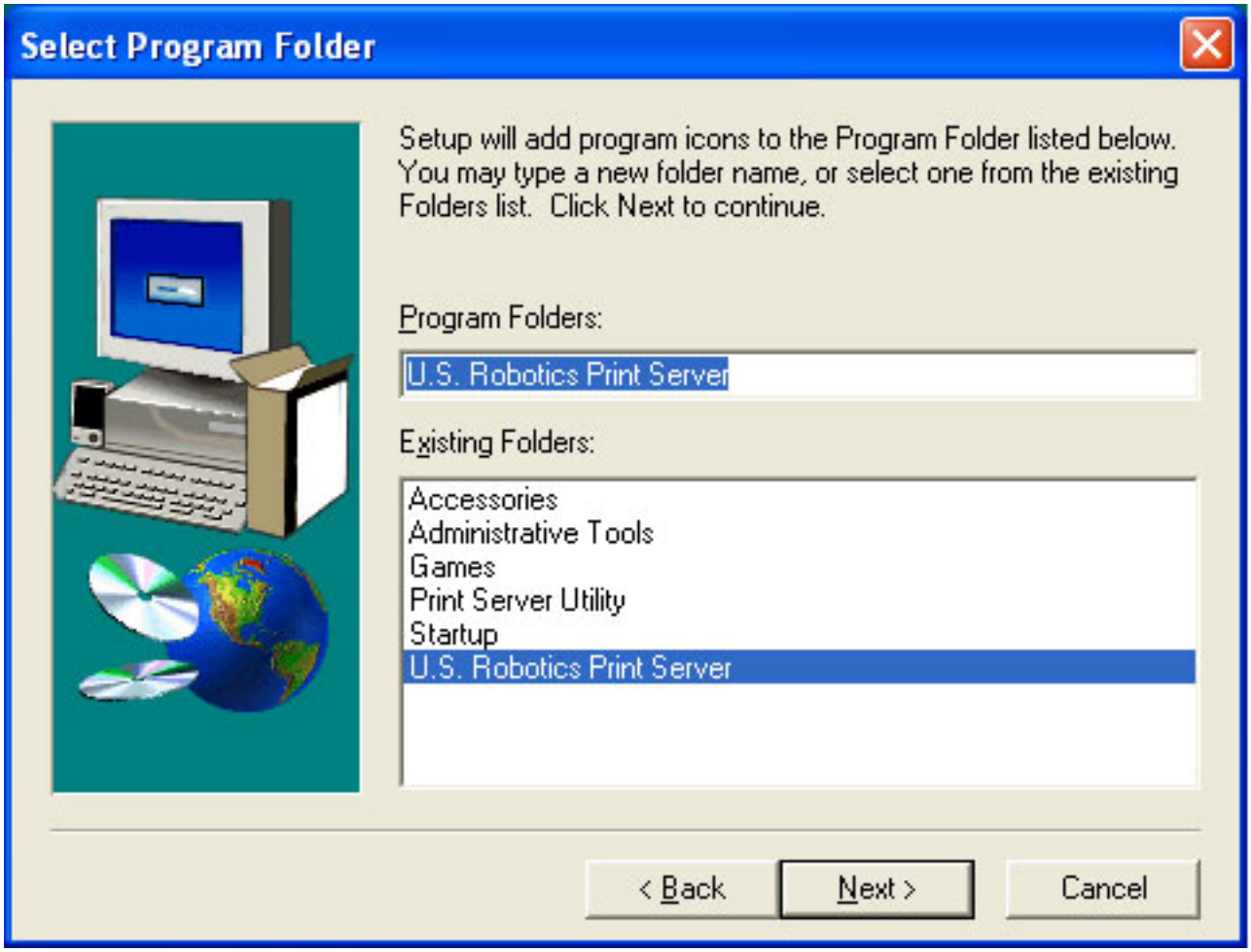
Administrator

Administrator will install the necessary tools for initial configuration, as well as the BiAdmin Management Utility. This should only be chosen by more advanced network clients.

1. Select **Administrator** from the list and click **Next**.
2. Click **Next**.



3. Click **Next** and then **Finish**.

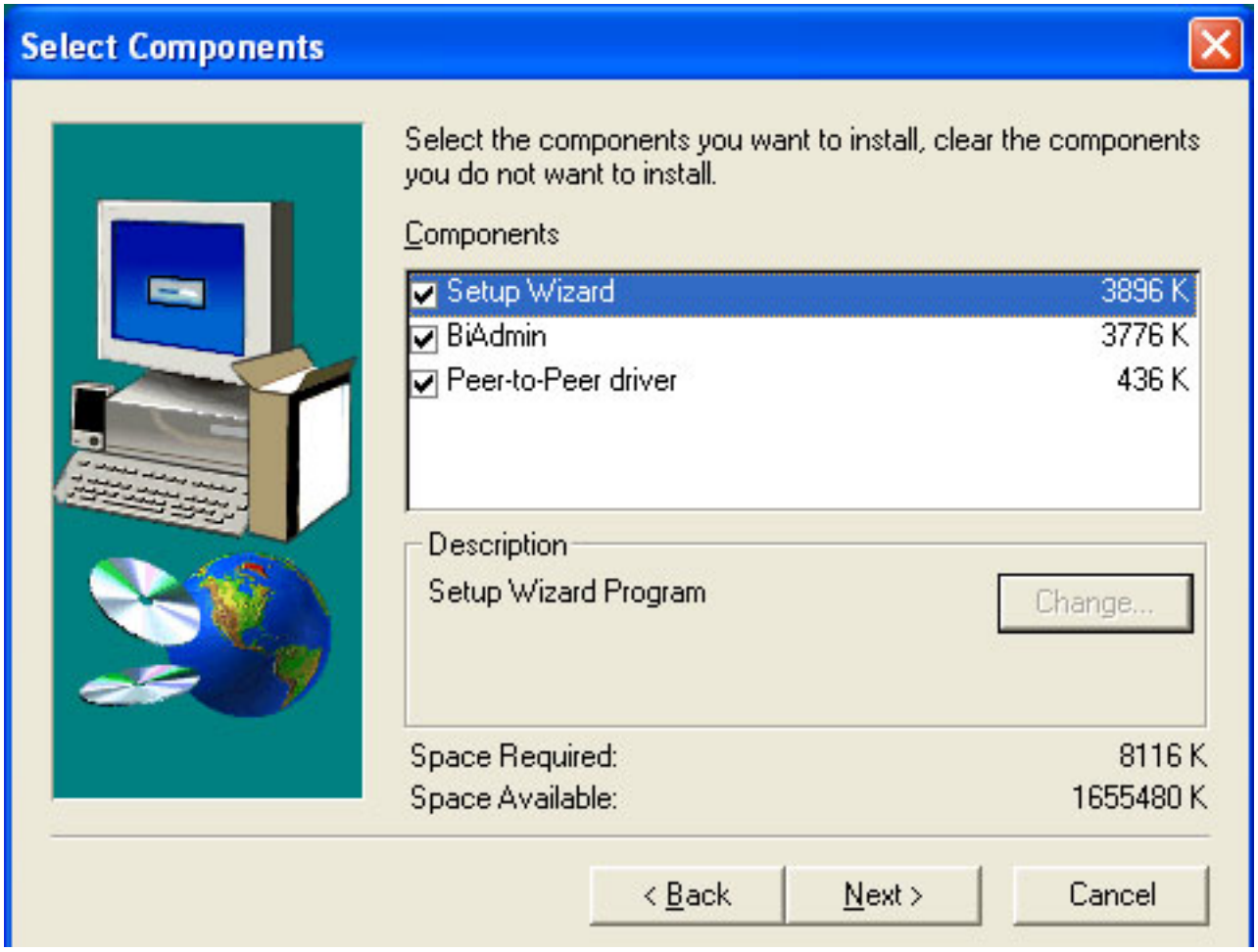


This will add the BiAdmin Management Utility to your computer. Click the icon on your desktop or the program menu link to launch the BiAdmin Management Utility. You can use the BiAdmin Management Utility to configure the settings of the Wireless USB Print Server.

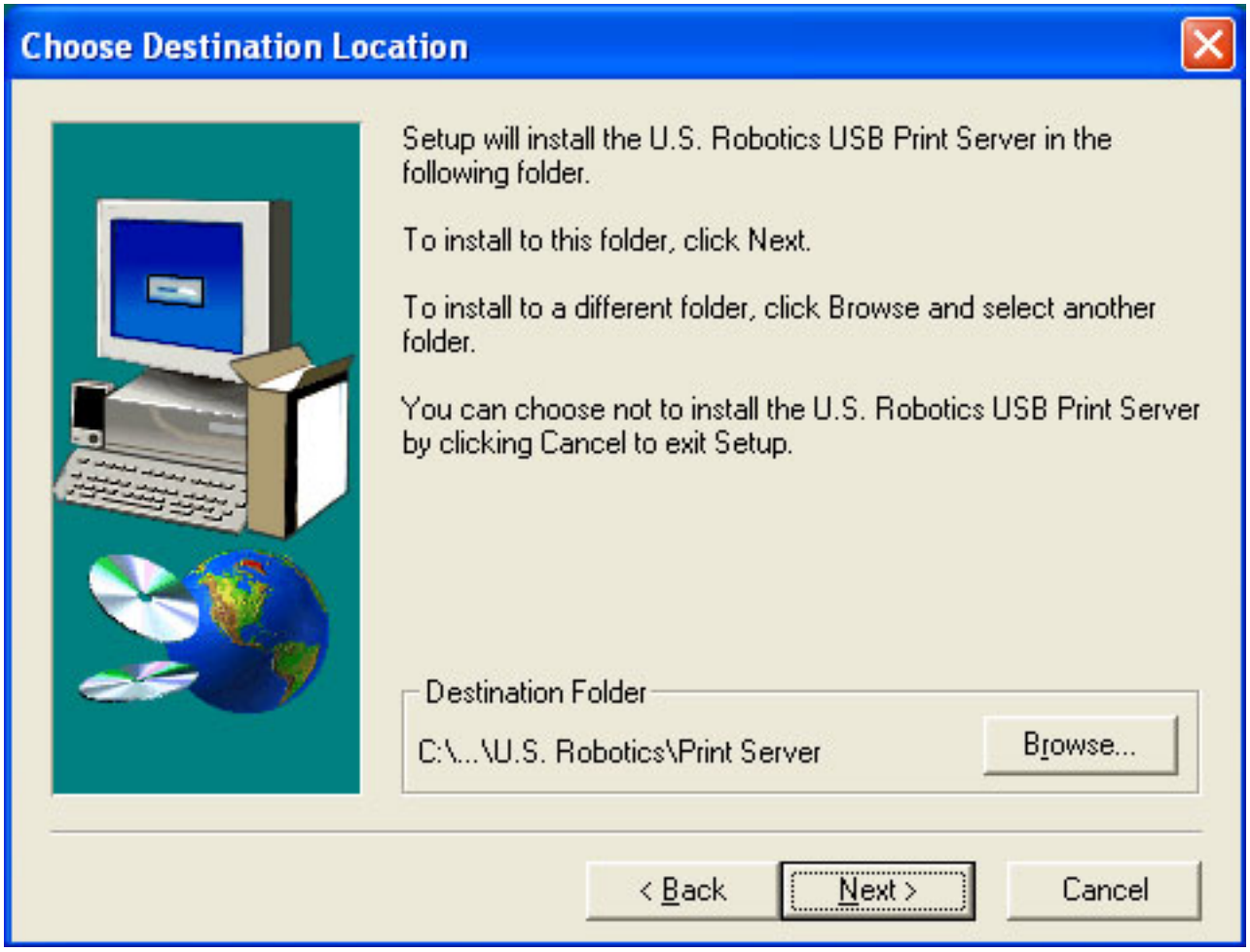
Custom

Custom allows the network client to select the options that will be installed from any combination of the BiAdmin Management Utility, the Setup Wizard, and the Peer-to-Peer Print Port driver. This should only be chosen by more advanced network clients.

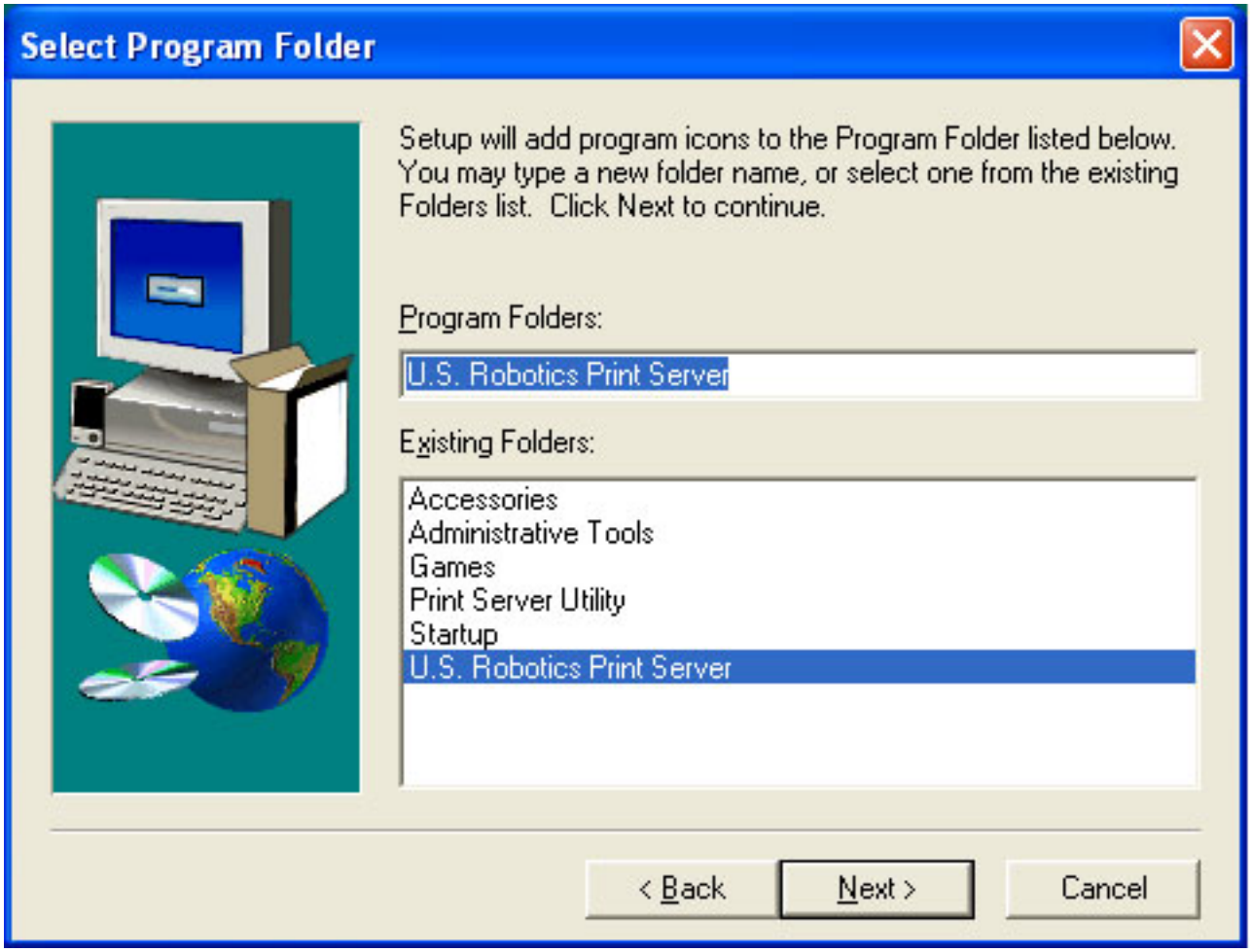
1. Select **Custom** from the list and click **Next**.
2. Select the options that you want to install: **Setup Wizard**, **BiAdmin**, and **Peer-to-Peer Driver**. Click **Next**.


Select Components
Select the components you want to install, clear the components you do not want to install.
Components
Setup Wizard 3896 K
BiAdmin 3776 K
Peer-to-Peer driver 436 K
Description
Setup Wizard Program
Change...
Space Required: 8116 K
Space Available: 1655480 K
< Back
Next >
Cancel

3. Click **Next**.



4. Click **Next** and then **Finish**.



The selected options are now installed.

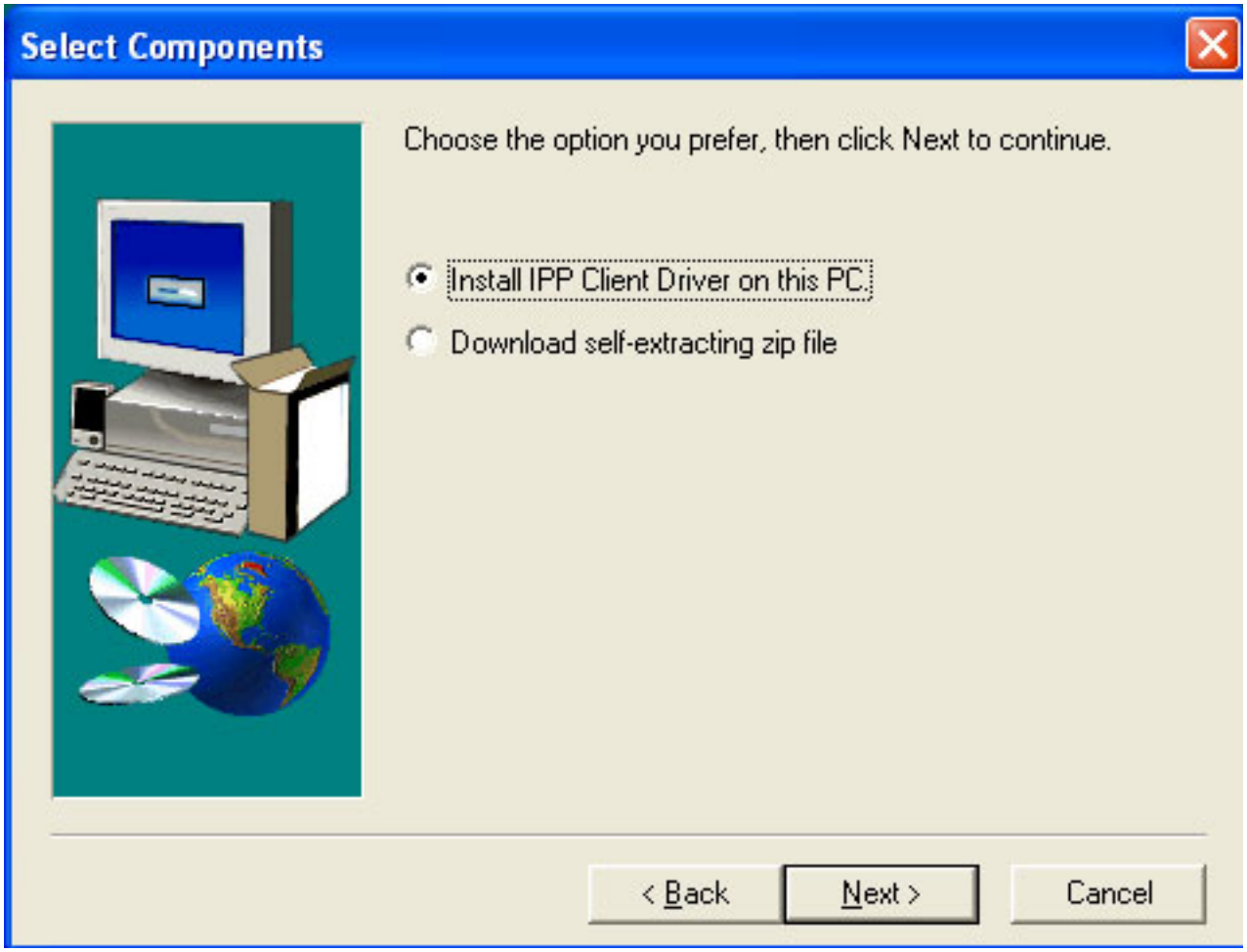
IPP Client

IPP (Internet Printing Protocol) Client is required if you want to **print to any IPP servers**, either on the local network or accessed remotely over the Internet. This should only be chosen by more advanced network clients.

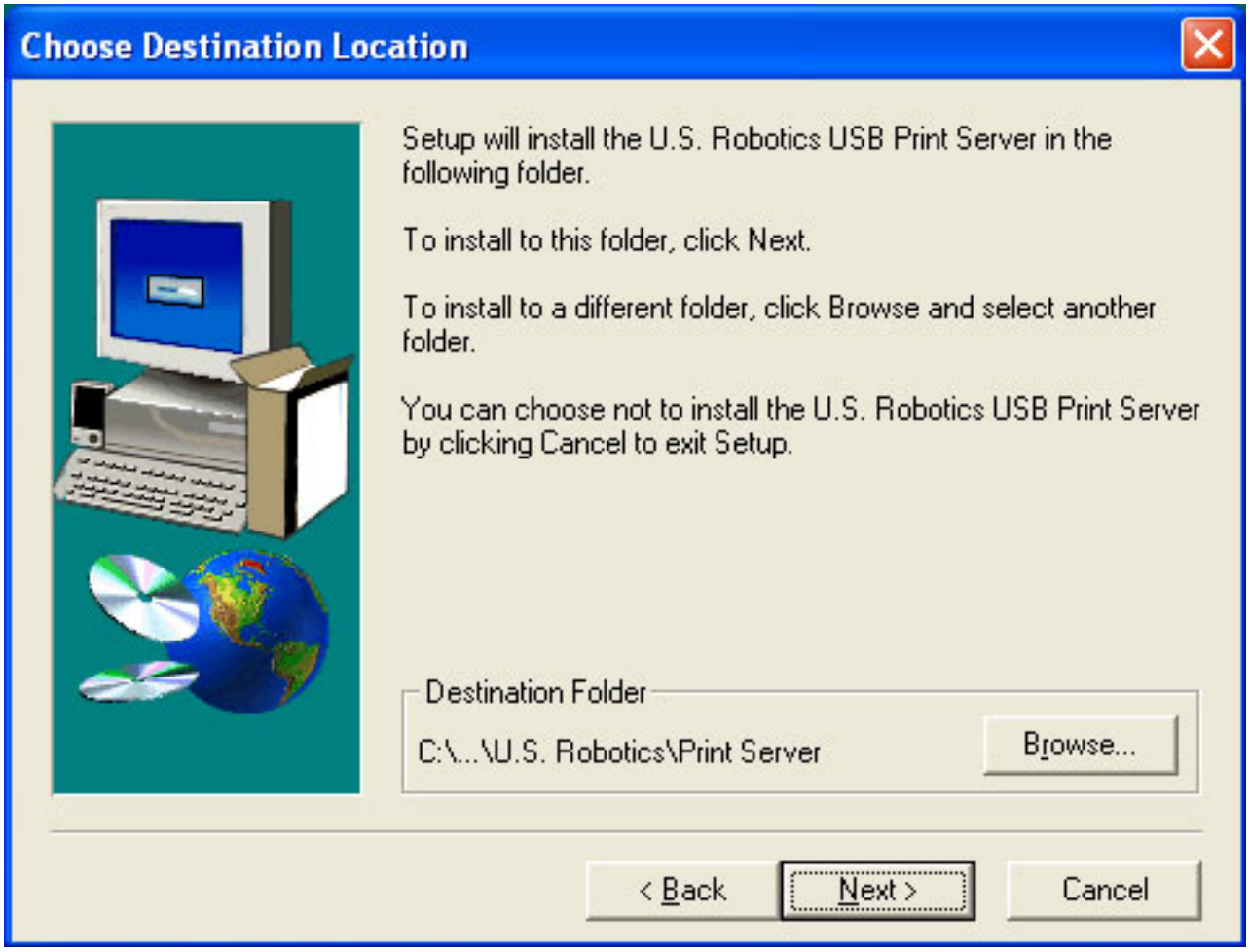
For these platforms, IPP Client software is supplied on the CD-ROM. You can also distribute the setup program (IPP_CLIENT.EXE) to users vial E-mail.

Installing from the Installation CD-ROM

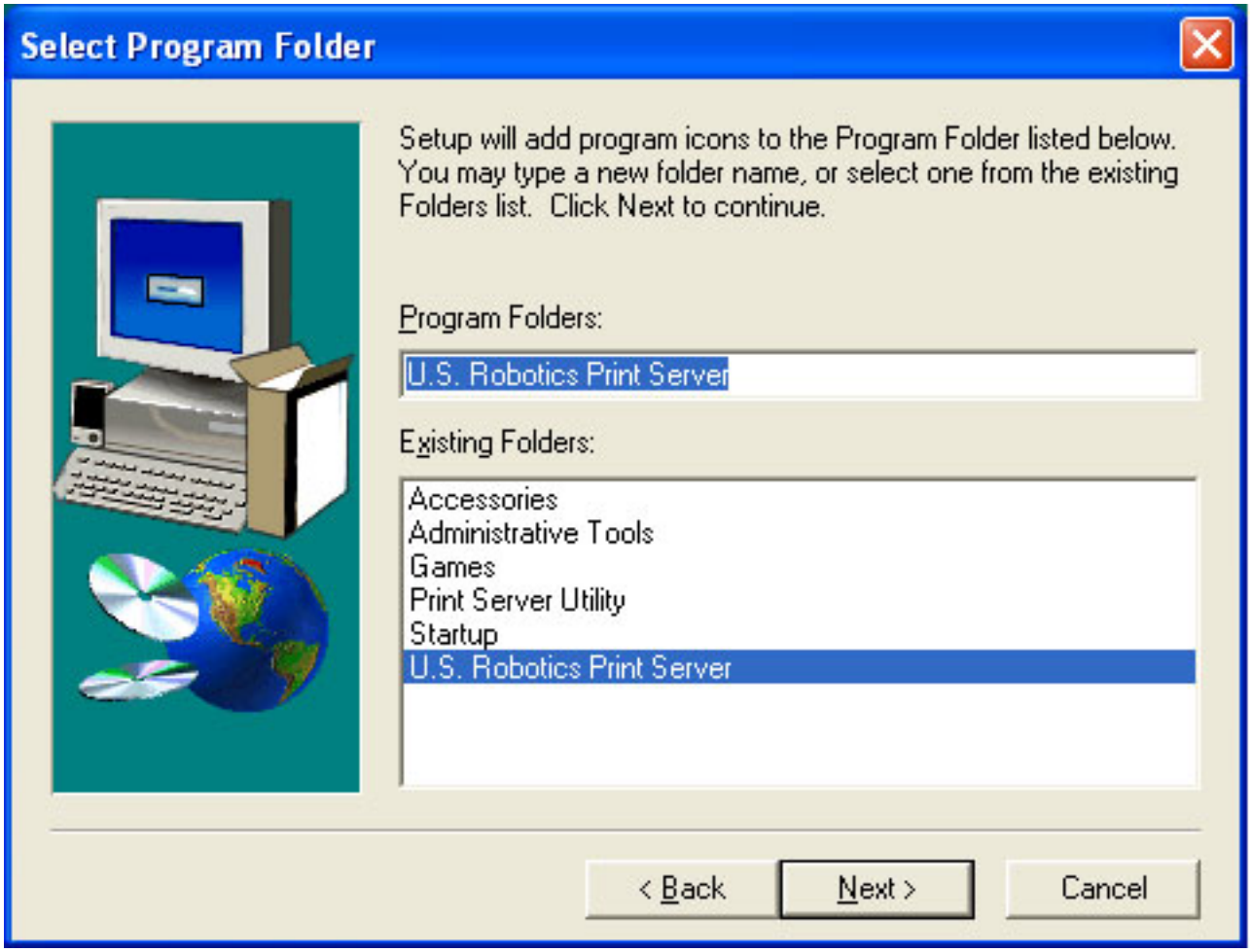
1. Select **IPP (Internet Printing Protocol) Client** from the list and click **Next**.
2. Select either **Install IPP Client Driver on this PC** or **Download self-extracting zip file** and click **Next**.


Select Components
Choose the option you prefer, then click Next to continue.
Install IPP Client Driver on this PC.
Download self-extracting zip file
< Back
Next >
Cancel

3. Click **Next**.



4. Click **Next** and then **Finish**.



Installing using IPP_CLIENT.EXE

1. Run this program to unzip the included files.
2. The IPP Setup program will then run.
3. Follow the prompts to complete the installation.

Wireless USB Print Server User Guide

USRobotics

Macintosh (AppleTalk)

The Wireless USB Print Server supports AppleTalk (EtherTalk), PAP, ATP, NBP, ZIP and DDP protocols, enabling Macintosh computers on the network to view and use the Wireless USB Print Server as a regular AppleTalk printer. Normally, no special configuration is required.

Software Requirements

System 9.x OS or newer.

AppleTalk Setup

1. Click the apple icon and choose **Control Panel** and then **AppleTalk**.
2. Ensure that **Ethernet** is selected under **AppleTalk Connection**.
3. Click **Chooser**. The Chooser panel will open.
4. Click on either the **LaserWriter 8** icon (recommended) or the **LaserWriter 7** icon. LaserWriter 8 makes use of the fonts installed in the printer itself, so the printing response time is quicker. LaserWriter 7 uses the fonts installed in the computer, which increases network traffic and takes more printing time.

5. Choose a PostScript printer from the list.
6. Click **Create** and it will search PPD automatically.
7. Select a printer description from the list.
8. Click **Select**.
9. Configuration is now complete.

Printing

Printing with the Wireless USB Print Server installed in an AppleTalk network is identical to normal printing. Select **File** and then **Print** and choose the desired printer.

Advanced Setup and Management

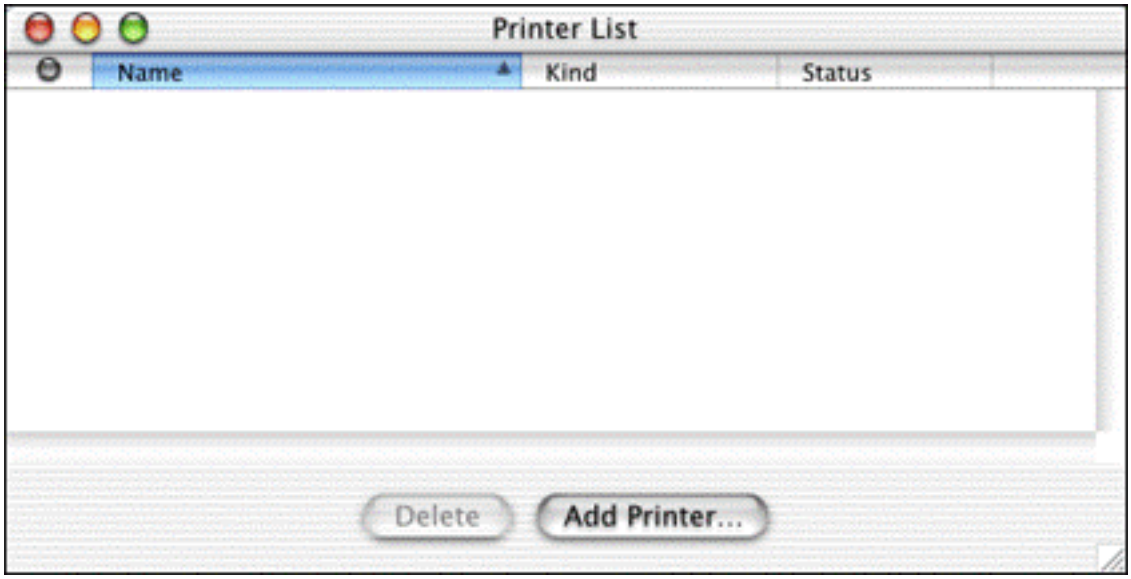
In a mixed Windows computer/Macintosh environment, you can use the **BiAdmin Management Utility** to configure the Wireless USB Print Server.

Macintosh OS X

If using LPR printing, you need to ensure the Wireless USB Print Server has a valid IP address before configuring your Mac as follows.

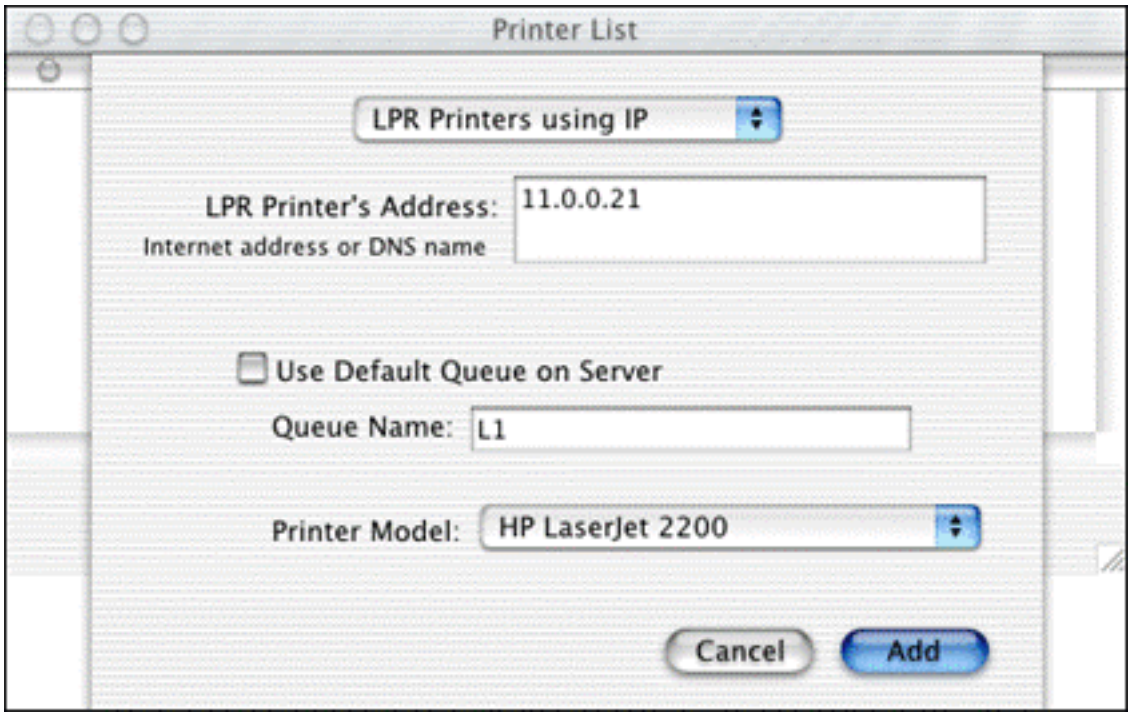
LPR printing Setup

1. Select the Printer List icon.



2. Click **Add Printer**.

3. Select **LPR Printers Using IP**.



4. Enter the IP address of the Print Server in the **LPR Printer's Address** field, and enter the **Queue Name** (L1 for port 1, L2 for port 2 if the Wireless USB Print Server has 2 printer ports.).

5. Select the Printer Model from the drop-down list.

6. Click **Add**.

7. Configuration is now complete.

Wireless USB Print Server User Guide

USRobotics

Unix

Overview

Your Wireless USB Print Server supports the LPD Unix printing method, which is supported by all common Unix systems.

You must configure both the Wireless USB Print Server and your Unix system, as described in the following sections.

Wireless USB Print Server IP Address Configuration

Because it supports dynamic IP Address allocation using DHCP or BOOTP, the Wireless USB Print Server ships with an IP Address of 0.0.0.0. This is NOT a valid IP Address. Therefore, you must do ONE of the following:

- Check your **DHCP server** (if you have one), and determine the IP Address allocated to the Wireless USB Print Server.
- Configure your **BOOTP Server** (if you have one), to provide an IP address to the Wireless USB Print Server, then restart the Wireless USB Print Server.
- Use a Windows platform and run the **Setup Wizard** or **BiAdmin** utility to allocate a valid IP Address to the Wireless USB Print Server.
- Add an entry to the **arp** table to associate the hardware address of the Wireless USB Print Server with the desired IP address, as follows:

arp -s *IP_Address 00:c0:02:xx:xx:xx*

Where:
IP_Address is the IP Address you wish to assign to the Wireless USB Print Server.
00:c0:02:xx:xx:xx is the hardware address of the Wireless USB Print Server.

Example: arp -s 192.168.0.21 00:c0:02:12:34:56

You should then assign this IP address to the Wireless USB Print Server using your Web Browser. Launch the **Web User Interface** and go to the **TCP/IP** section. Select **Fixed IP Address** and then enter the appropriate information.

Note: The hardware address of the Wireless USB Print Server is shown on a sticker on the base of the device.

Other Wireless USB Print Server Configuration

The recommended method to configure the Wireless USB Print Server is to use the Web User Interface.

- Ensure that the TCP/IP settings are correct for your network.
- The logical printers (e.g. L1) must be configured correctly to match your system.

LPD Configuration

Configuration for **LPD on IBM AIX 4.15**, **LPD on System V**, **LPD on Linux**, and **LPD on BSD** are described below.

LPD on IBM AIX 4.15

Before proceeding, ensure that the Wireless USB Print Server has been assigned an IP

Address. To setup your AIX system for LPD printing, perform the following steps.

1. Add the Wireless USB Print Server to **/etc/hosts.lpd**, using the name you assigned to the Wireless USB Print Server.

2. Start the LPD daemon if it is not running, using the following command: **start src -s qdaemon**

3. Start the system administration tool **smit** and select **Print Spooling**.

4. Create the required number of queues (one for each logical printer) by selecting:

   Add a Print Queue

   Remote (Printer attached to Remote Host)

   Standard Processing

5. Use the following information:

   Name of queue to add: Use a single-word queue name, which indicates which printer is attached.

   Hostname for remote server: Wireless USB Print Server name as used in /etc/hosts.lpd.

   Name of queue on remote server: Logical printer number (e.g. L1) to service this queue.

   Type of print spooler on remote server: Use default value. (AIX Version xxx)

6. Ensure that the logical printers are configured in the Wireless USB Print Server.

7. Print using the following command: **lp -d *printer_queue file_name***

   Where:
   printer_queue is one of the entries used in *Name of queue to add*.
   file_name is the file you wish to print.

LPD on System V

Before beginning LPD Setup, ensure that an IP Address has been assigned to the Wireless USB Print Server. Keep the following points in mind:

- The **remote host name** is the name of the Wireless USB Print Server.
- The **remote printer name** is the print queue name for the Logical Printer.
- Logical printers also need to be configured on the Wireless USB Print Server itself.
- If your UNIX asks for the LPD type, be sure to identify the service type as BSD.
- The Wireless USB Print Server's LPD protocol meets BSD system standards.

Commands

In the sample commands shown, ***printer_name*** is the name of the Print Queue serviced by the Wireless USB Print Server, and ***Spooler_directory*** is the name of the directory, which is used to spool the print jobs.

- Stop Print Services: **/usr/lib/lpshut**
- Add a System Printer: **/usr/lib/lpadmin -p *printer_name* -v /dev/null**
- Restart the Print Services: **/usr/lib/lpsched**
- Enable printing to the new printer device: **enable *printer_name***
- Start accepting jobs for the new printer device: **accept *printer_name***
- Create a spooling directory: **mkdir /usr/spool/*Spooler_directory***
- Make spooling daemon the owner of this directory: **chown daemon /usr/spool/*Spooler_directory***
- Create read/write permissions: **chmod 775 /usr/spool/*Spooler_directory***
- Give permissions to LPD processes: **chgrp daemon /usr/spool/*Spooler_directory***

Adding Remote Printers

A remote printer is added by inserting the following line in the /etc/printcap file.

Note: The entry is really one line, but can be entered as shown. Use a TAB character where shown.

Printer_name|**Remote_Printer_Alias:**
[Tab] **:lp=:**
[Tab] **:rm=***PS_NAME***:**
[Tab] **:rp=***Logical_Printer_name***:**
[Tab] **:sd=***Spooler_directory***:**
[Tab] **:mx#0:**

Example:

Marketing|RP1_PS123456:\
[Tab] :lp=:\
[Tab] :rm=PS_Rm203:\
[Tab] :rp=L1:\
[Tab] :sd=/usr/spool/Marketing:\
[Tab] :mx#0:

Repeat this process for each Logical Printer/Print Queue combination that you wish to create.

LPD on Linux

If using the command line, the procedure is the same as for System V. (above)

On recent Linux distributions, you can use the graphical X-windows interface instead of the command line. The procedure is described below, but may vary according to your version of Linux.

1. Start your X-windows shell.
2. Select **Control Panel** and then **Printer Configuration**.
3. Select **Add**. For the printer type, select **Remote Unix (lpd) Queue**.
4. Use the following data to complete the resulting dialog:

   Name: Enter a name for this printer

Spool Directory: /var/spool/lpd/*name_of_printer*

File Limit: 0 (no limit)

Remote Host: Name or IP Address of Wireless USB Print Server, e. g. SC3000014

> **Note**: host file entry is required to use the name instead of IP Address

Remote Queue: **L*n***
Where ***n*** is the Logical Printer number. By default, L1 is port 1, and L2 is port 2 if the Print Server has 2 ports.

5. Save this data and exit the Printer Configuration. Configuration is now completed and the printer is now available for use.

LPD on BSD

Before continuing, ensure that an IP Address has been assigned to the Wireless USB Print Server. Remember the following:

- The **remote host name** is the name of the Wireless USB Print Server.
- The **remote printer name** is the logical printer (e.g. L1) on the Wireless USB Print Server.
- If asked for the LPD type, enter the service type as BSD.

Commands

In the sample commands shown, ***printer_name*** is the Print Queue serviced by the logical printer on the Wireless USB Print Server, and ***Spooler_dir*** is the name of the directory, which is used to spool the print jobs.

- Create a spooling directory: **mkdir /usr/spool/*Spooler_dir***
- Set spooling daemon as owner of this directory: **chown daemon /usr/spool/*Spooler_dir***
- Create read/write permissions: **chmod 775 /usr/spool/*Spooler_dir***

- Give permissions to LPD processes: **chgrp daemon /usr/spool/*Spooler_dir***
- Start lcomputer print mechanism: **lcomputer start *printer_name***

Adding Remote Printers

A remote printer is added by inserting the following line in the /etc/printcap file.

> **Note:** The entry is really one line, but can be entered as shown. Use a TAB character where shown.

Printer_name|**Remote_Printer_Alias:**
[Tab] **:lp=:**
[Tab] **:rm=***PS_NAME***:**
[Tab] **:rp=***Logical_Printer_name***:**
[Tab] **:sd=***Spooler_directory***:**
[Tab] **:mx#0:**

Where:

Printer_name is the Print Queue name used to store jobs for the corresponding logical printer.
PS_NAME is the Wireless USB Print Server name defined in /etc/hosts.
Logical_Printer_name is the logical printer name on the Wireless USB Print Server. (e.g. L1)
Spooler_directory is the directory you created.

Example:

Marketing|RP1_PS123456:\
[Tab] :lp=:\
[Tab] :rm=PS_Rm203:\
[Tab] :rp=L1:\
[Tab] :sd=/usr/spool/Marketing:\
[Tab] :mx#0:

Repeat this process for each Logical Printer/Print Queue combination that you wish to create.

Printing using LPD

For LPD printing instructions, refer to your UNIX manual.

The following example is for a BSD system: **lpr -P *printer_name filename***

Where:
printer_name is the name of the Print Queue defined on the Unix host.
filename is the name of the file you wish to print.

Example: lpr -P Marketing /etc/hosts

In the above example, the /etc/hosts file is sent to the printer queue Marketing. It will then be sent to the logical printer associated with this queue.

Wireless USB Print Server User Guide

USRobotics

Netware

Overview

The Print Server must be configured as a valid device on your TCP/IP network. This printing method uses LPR over TCP/IP, not the Netware protocol.

To use NDPS (Novell Distributed Printing Services), the Novell server must be running Novell NetWare 5, and the computers (clients) must be running IntranetWare Client V2.2. or later.

The following procedure is designed to enable Public Access Printing under NDPS. Public Access Printing allows anybody on the network to access the printer.

Creating an NDPS Manager Object

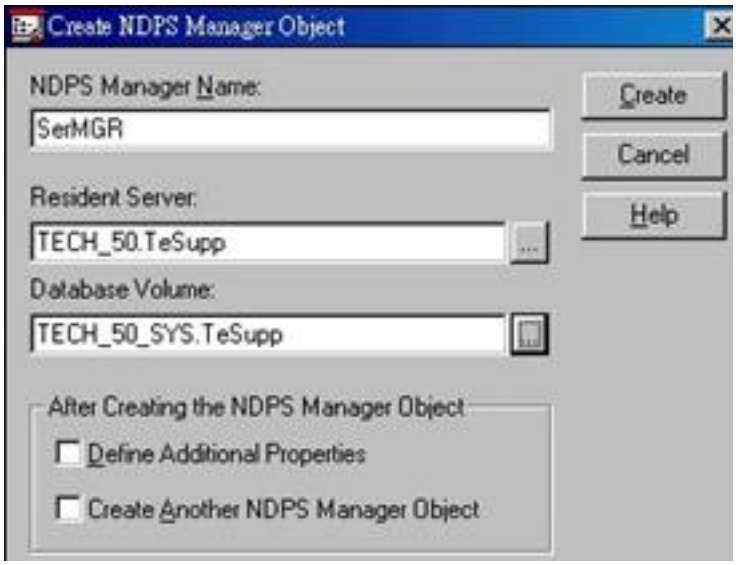
If an NDPS Manager Object already exists, skip this procedure and proceed to **Creating an NDPS Printer Agent**.

1. Login to NetWare 5.0 Server as Admin and start the NetWare Administrator program **Nwadmn32.exe**.

2. Select the container on NetWare Administrator where you want the NDPS Manager object to reside. (e.g. TeSupp)

3. Select **Create - Object** from the menu bar to view the New Object dialog.

4. Select **NDPS Manager** as the object to create. The Create NDPS Manager Object window shown below will appear.



5. Type a name in the **NDPS Manager Name**.(e.g. SerMGR, as shown above)

6. Browse the **Resident Server** and select where you want the NDPS Manager object to be assigned. (e.g. TECH_50.TeSupp, as shown above)

7. Browse the **Database Volume** and select where you want the NDPS Manager database to be assigned. (e.g. TECH_50_SYS.TeSupp, as shown above)

8. Click **Create**. The new NDPS Manager will appear in the main browser window.

   To start the NDPS Manager in future, enter the following command at the console: **LOAD NDPSM**
   then select the NDPS Manager object.

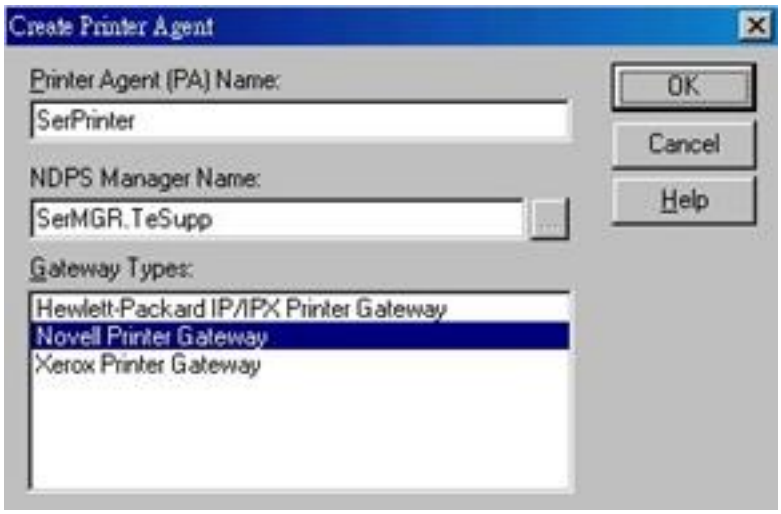
   To start the NDPS Manager whenever you bring up the server, add a command like the following to your server's AUTOEXEC.NCF file: **LOAD NDPSM *SerMGR.TeSupp***
   The last item is the name of the NDPS Manager object you wish to load.

9. After creating an NDPS Manager, you can create NDPS printers by using NetWare Administrator, as explained below.

Creating an NDPS Printer Agent

To create Public Access Printers using the NDPS Manager Object in NetWare Administrator, follow this procedure:

1. Start the NDPS Manager object you will be using to control the Printer Agent.
2. At the Identification page, click **Printer Agent List**.
3. Click **New** to see the Create Printer Agent window, as shown below.



4. Enter the desired name for the **Printer Agent (PA) Name**.
5. Normally, the **NDPS Manager** will be the NDPS Manger object you are using.
6. Select **Novell Printer Gateway** in the Gateway Type.
7. Click **OK** and then select the available printer.
8. Select **Remote (LPR on IP)** in the Connection Type.
9. Click **Next** to see the following Configure Port Handler screen.

10. In the **Host address IP** field, enter the IP Address previously assigned to the Print Server device.

11. In the **Printer Name** field, enter the Logical Port name on the Print Server. (L1 for Port 1, L2 for port 2).

12. Click **Finish**, then select appropriate drivers for Windows 98 etc as required. The new Printer Agent will now appear in the Printer Agent List window.

Repeat this procedure for any other ports on the Print Server or for any other logical printers you wish to use. Client computers can now be configured.

Wireless USB Print Server User Guide

USRobotics

Windows Server

Windows NT4.0 Server

If using Windows NT 4.0, Microsoft TCP/IP Printing Support must be installed.

- If it is already installed, add a TCP/IP Remote Printer, as described below.
- If it is not already installed, install TCP/IP printing support, then add a TCP/IP Remote Printer.

Adding TCP/IP Printing Support

1. Windows XP, 2000, and NT Users:
    - Click Windows **Start** > **Control Panel > Network**.

    Windows Me, 98, and 95 Users:

    A. Click Windows **Start** > **Settings** > **Control Panel > Network**.
2. Click the Service option and ensure that **Microsoft TCP/IP Printing** is enabled. If it is not enabled, click **Add** and enable it as usual.
3. If you added services in step 2, reboot the computer for the changes to take

effect.

Adding a TCP/IP Remote Printer

1. Windows XP, 2000, and NT Users:
    - Click Windows **Start** > **Printers and Faxes**.

    Windows Me, 98, and 95 Users:

    A. Click Windows **Start** > **Settings** > **Control Panel**.

    B. Within Control Panel, click **Printers and Faxes**.
2. Launch the **Add Printer wizard**.
3. When prompted with **This printer will be managed by**, select **My Computer** and click **Next**.
4. Select **Add Port...** and then select **LPR Port**. Click **New Port**.
5. In the **Name of Address of server providing lpd:** dialogue box, enter the Wireless USB Print Server's IP address.
6. In the **Name of printer or print queue on that server** dialogue box, enter the appropriate logical printer number (e.g. L1) as previously configured on the Wireless USB Print Server.

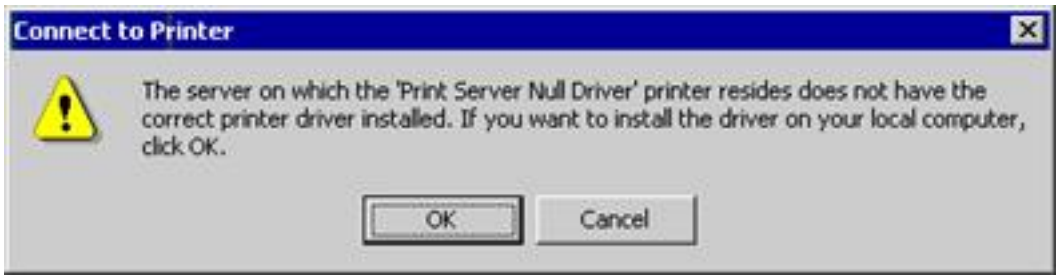
    By default, L1 is port 1, and L2 is port 2 if the Wireless USB Print Server has 2 printer ports.
7. Click **OK**. When returned to the Printer Ports window, select **Close** and then install your printer driver as usual.
8. When prompted whether or not the printer will be shared, select the **Sharing** button.
9. In the **Shared** dialog box, enter the shared printer name. (The shared name is how other users will see this printer.) Click **OK** to save and exit. Client computers can now be configured.

Windows 2000/2003 Server

1. Launch the **Add Printer Wizard**, select **Network Printer**, then click **Next** to browse for the Wireless USB Print Server.

2. Locate and double-click the **Wireless USB Print Server**, select the desired port, and click **Next**.

   A message like the following will be displayed:



3. Click **OK** and select the correct Manufacturer and Model for this printer.

4. Follow the prompts to complete the installation.

5. In the Printers folder, right-click the new printer and select **Sharing**.

   Select **Shared As:** and enter an appropriate name for this printer. Users will see this name when browsing for the printer during installation.

   If desired, click **Additional Drivers** and install printer drivers for other versions of Windows, such as Windows 98. This will assist users during the installation process.

6. Click **OK** to close this Window. Configuration is now complete. Client computers can now be configured.

Wireless USB Print Server User Guide

USRobotics

Web User Interface Management Utility

The following section describes the various functions of the Web User Interface. This utility provides quick access to all the settings of the Wireless USB Print Server.

To access the Web User Interface:

1. Start you Web browser.
2. In the location or address line, type the IP address of the Wireless USB Print Server and press ENTER.
   IP Address Example: **192.168.*x.x***

If you do not know the IP address of the Wireless USB Print Server, open the **BiAdmin Management Utility**. The IP address, along with other information about the print server, is displayed on the first screen of the utility. You could also run the **Setup Wizard** and write down the IP address when it is displayed or print a copy of the diagnostic page. The IP address is among the information provided in the diagnostic page.

When the Web User Interface has opened, you will see the following menu options on the left-hand side:

Server Status

Printer Status

Configure Server

Logical Printers

Wireless Basic

Wireless Security

Apple Talk

NetBEUI

TCP/IP

Wireless USB Print Server User Guide

USRobotics

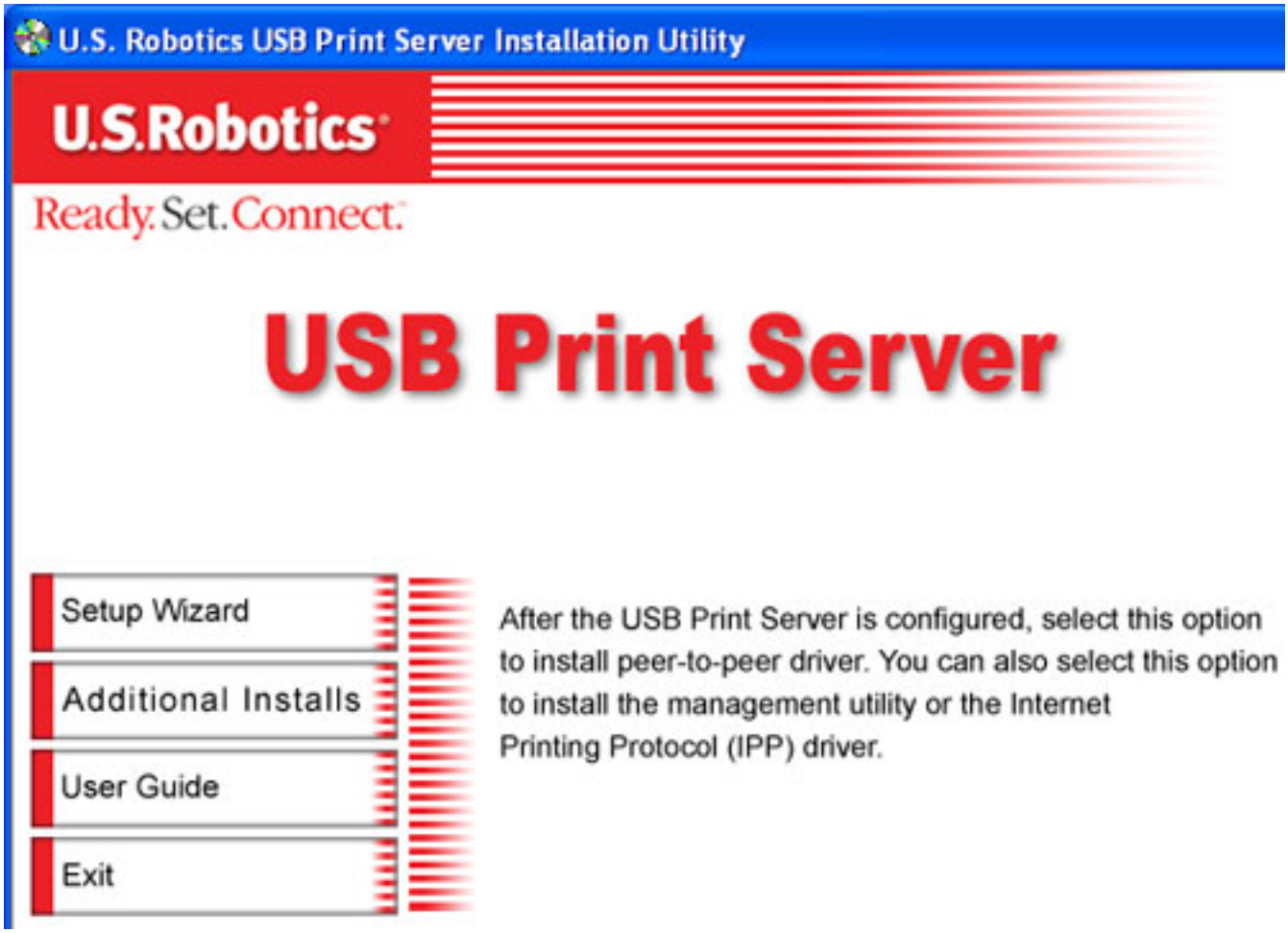
Web User Interface Management Utility

The BiAdmin Management Utility can be used to configure the settings of the Wireless USB Print Server. This utility is for advanced users or for users on a network with multiple Wireless USB Print Servers. On networks with multiple Wireless USB Print Servers, it is recommended that you use the BiAdmin Management Utility instead of the Web User Interface.

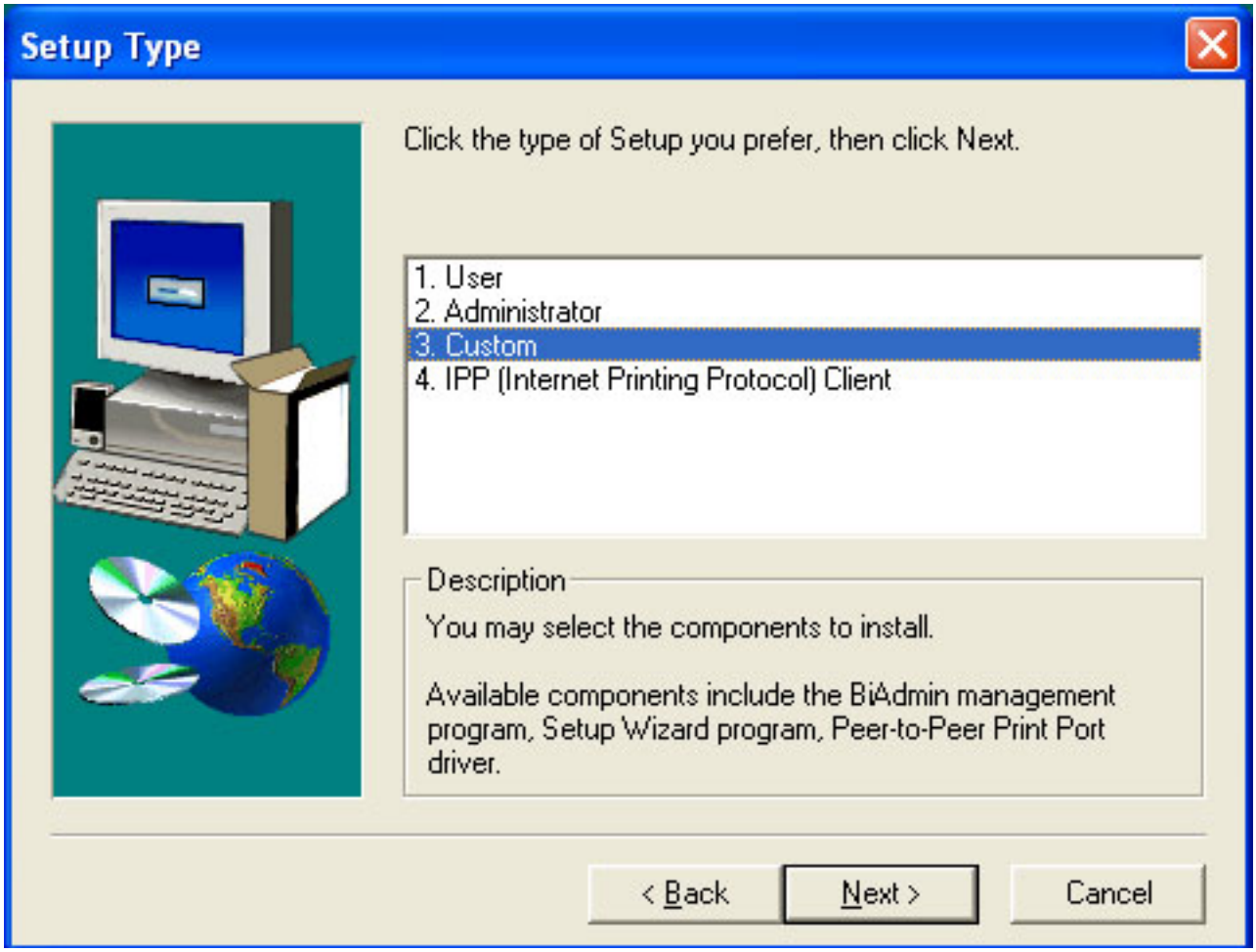
Installing the BiAdmin Management Utility

If you configured your client installation as Admin, the BiAdmin Management Utility is already installed on your computer.

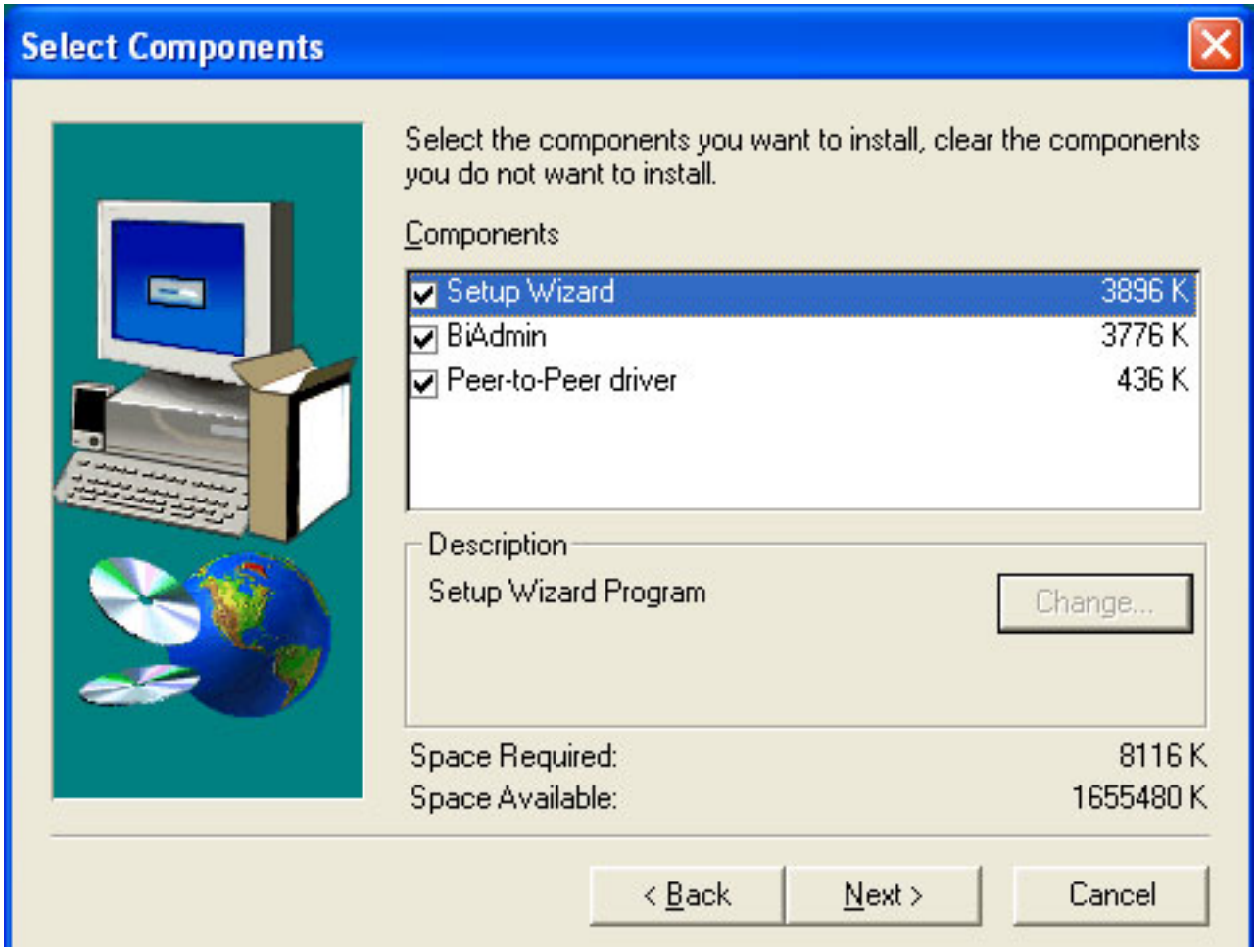
1. Insert the U.S. Robotics Installation CD-ROM into your CD-ROM drive.
2. Click **Additional Installs** and then click **Next**.



3. Select **Custom**.



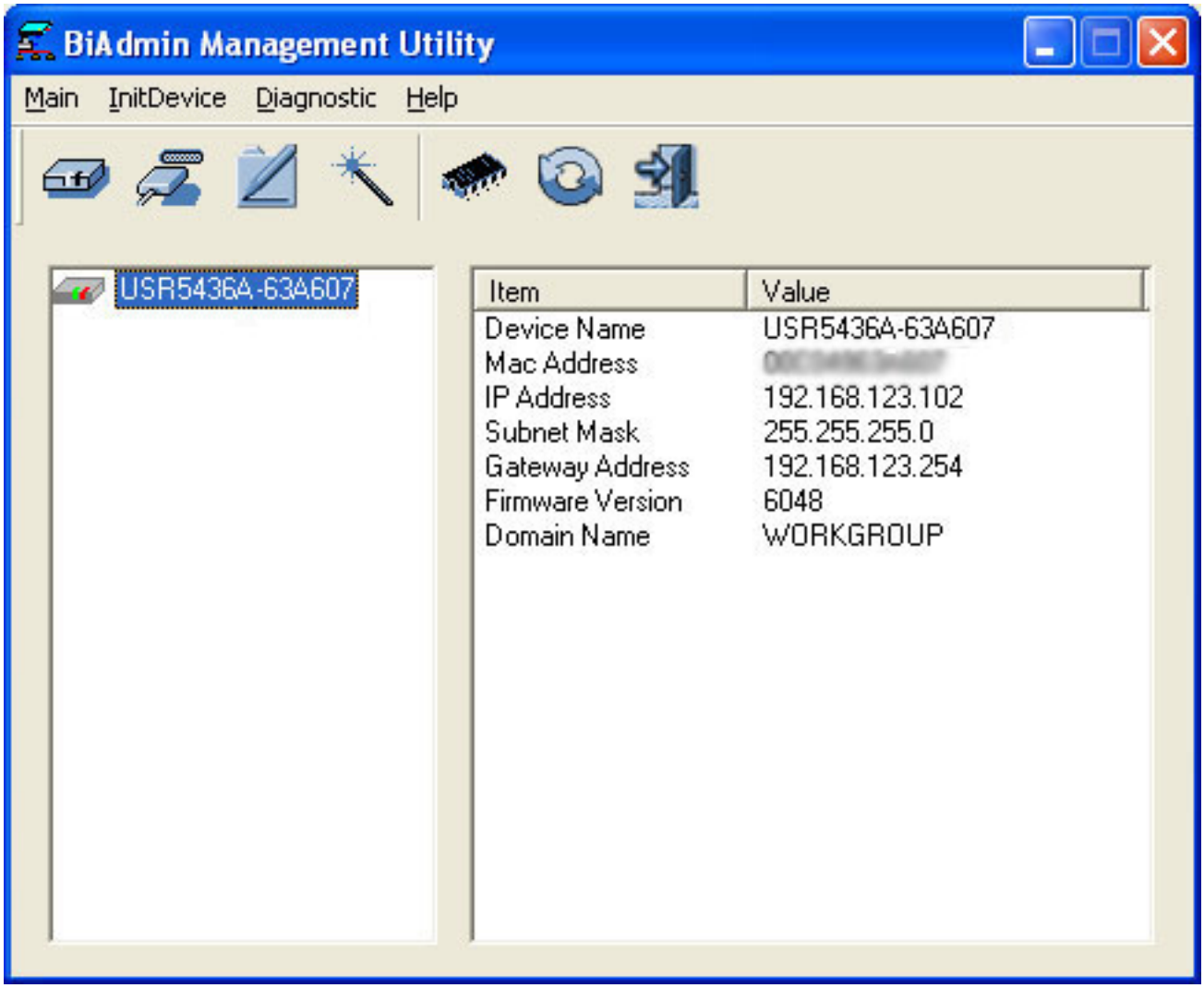
4. Verify sure **BiAdmin** is selected.



4. Follow the on-screen instructions to complete the installation.

Using the BiAdmin Management Utility

You can launch the BiAdmin Management Utility by using the link in the Programs menu. When it is launched, the BiAdmin Management Utility will search your network for all the Wireless USB Print Servers that are attached and running. The Wireless USB Print Servers will then be shown in the device list of the BiAdmin Management Utility.



On the left side of the screen, you will see each Wireless USB Print Server that is attached to the network. If you select a Wireless USB Print Server, you will see the settings information on the right side of the screen.

If the desired Wireless USB Print Server is not listed, try performing the following steps:

- Make sure that the Wireless USB Print Server is installed and receiving power, then click  in the WUI to refresh the list.
- If the Wireless USB Print Server is on another LAN segment, in the menu, click **InitDevice** and then **Attach** to locate and display the Wireless USB Print Server.

At the top of the main BiAdmin Management Utility screen, there are **status icons** and the following menus:

Main: From this menu, you can select the following:

- **Device Status**
- **Printer Status**
- **Configure**
- **Upgrade**
- **Refresh**
- **Exit**

InitDevice: From this menu, you can select and perform the following:

- **Reset Device**: This will cause the Wireless USB Print Server to reboot. To reboot the print server, click **Yes**. This should be done after making any configuration changes or if the Wireless USB Print Server stops responding.
- **Restore to Factory Default**: To restore all of the Wireless USB Print Server values to the factory default settings, click **Yes**. To restore the settings only for the current screen in the management utility, click **Set to Default** on that particular screen.
- **Attached Remote**: This is used to connect to a Wireless USB Print Server that is located on another LAN segment. You need to enter IP address of the remote Wireless USB Print Serve and click **Set**. If your LAN does not have a router, this option is not applicable.
- **Connected Protocol**: This option allows you to designate which LAN protocol is used for communication between the selected Wireless USB Print Server and this application. You should select only one protocol.

Diagnostic: From this menu, you can select **Print Test Page** and then select the printer that should print the page. This will print out a test page which contains the configuration settings of the Wireless USB Print Server.

Help: From this menu, you can select **Help Topics** or the **About BiAdmin** for more information on the BiAdmin Management utility.

Status Icons

Once a Wireless USB Print Server has been selected, the icons can be used. The icons provide status information as well as access to the selected Wireless USB Print Server settings. If an icon is grayed out, that option or protocol is unavailable.

 **Device Information**

 **Printer Status**

 **Configuration**

 **Wizard**

 **Firmware Upgrade**

 **Refresh**

 **Exit**

Printing Methods

The Wireless USB Print Server supports a number of printing methods:

- **Peer-to-peer Printing** means that the print jobs are stored (queued) on your computer, and sent directly to the Wireless USB Print Server when it is available.
- **Windows SMB Printing** is a Microsoft standard for using a Network Printer. No additional software needs to be installed on your Windows computer, and printing from MS-DOS programs is supported. However, because the Wireless USB Print Server cannot store files, large print jobs may cause problems.
- **Server-based Print Queue** means that all print jobs are stored (queued) on the Network Server (e.g. Windows NT/2000) and then sent to the Wireless USB Print Server. This allows the Network Administrator to modify the Print Queue. For example, an important job can be moved to the head of the queue.
- **AppleTalk** is also supported, and normally no configuration of the Wireless USB Print Server is required. Refer to the section for **Macintosh installation** information.

Which printing method should I use?

- If using Windows 95, 98, NT, Me, 2000, or XP, the easiest method to use is Peer-to-peer Printing.
- If using Windows and you need to print from MS-DOS programs, or you don't wish to install additional software, use SMB. However, SMB is not suitable for large, complex documents, so if you need this as well as MS-DOS printing, you should install BOTH Peer-to-peer Printing and SMB printing. MS-DOS programs can use the SMB printer, while the Windows programs should use Peer-to-peer

Printing.

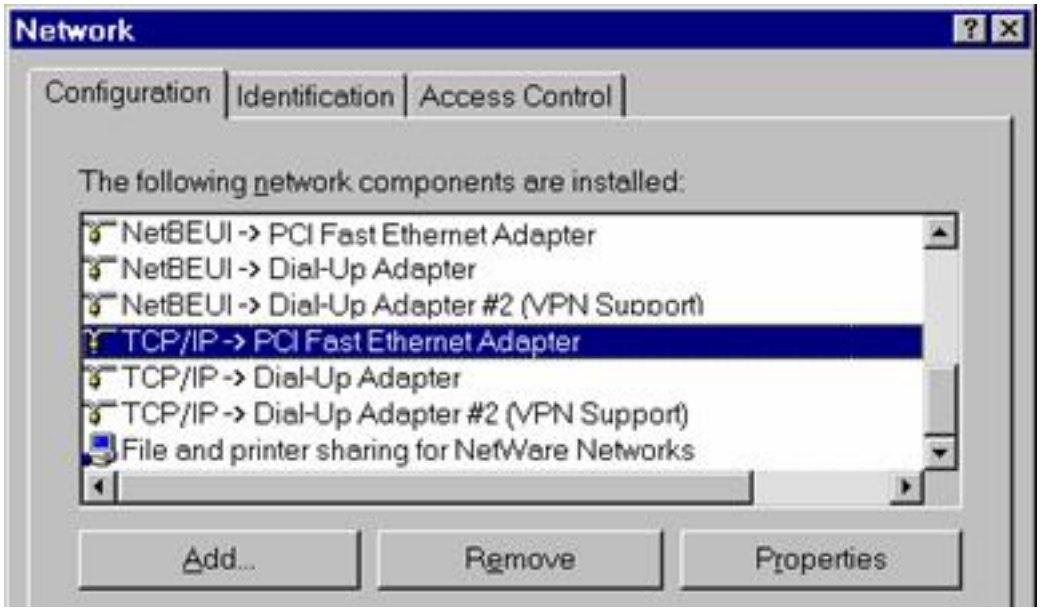
- If your LAN has Network Servers (e.g. Windows NT, Windows 2000 Server), use the method advised by your Network Administrator. The Wireless USB Print Server can print via a queue located on a Network server, if desired.
- **Unix users**
- **Macintosh users**

Checking your Network Protocols (Windows 9x)

Your computer must have either the TCP/IP or NetBEUI protocols installed. (All versions of Windows after Windows 95 have TCP/IP installed by default.)

If you are using the **Peer-to-peer Printing**, the installation program will check this for you. If you are using other methods, you must perform a manual check of these settings. Perform the following steps:

1. Click Windows **Settings, Control Panel**, and then **Network**. You should see a screen similar to the following:



   The top line in the list (NetBEUI -> PCI Fast Ethernet Adapter) indicates that the NetBEUI protocol is installed on this computer. Your computer will show the name of the your Network card rather than PCI Fast Ethernet Adapter.

   The highlighted line (TCP/IP -> PCI Fast Ethernet Adapter) indicates that TCP/IP is installed. Your computer will show the name of your Network card instead of PCI Fast Ethernet Adapter.

2. If neither line is present, you will need to install the NetBEUI protocol. Click **Add**, **Protocol**, and then **Microsoft**. Click **NetBEUI** and then **OK**. You may be prompted for your Windows CD-ROM. This protocol requires no configuration.

   If required, you can also install TCP/IP. However, depending on your LAN environment, TCP/IP may require further configuration.

3. If either protocol is already installed, proceed with installation.

Windows Peer-to-peer Printing

With this printing method, print jobs are stored (queued) on your computer and then sent to the Wireless USB Print Server when it is available.

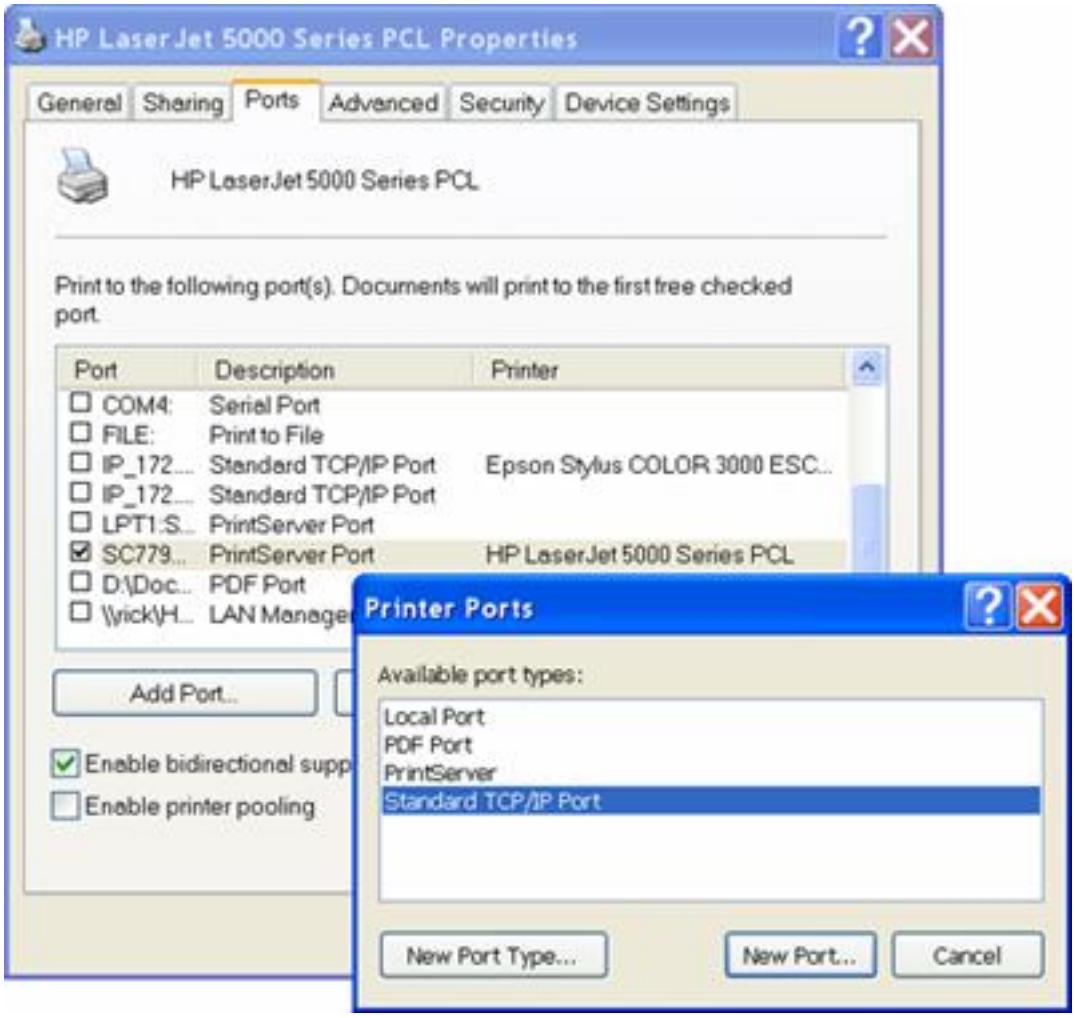
Windows 2000 and XP require no additional software.

For other versions of Windows, the supplied PTP (Peer-to-Peer) Printer Port software must be installed on each computer.

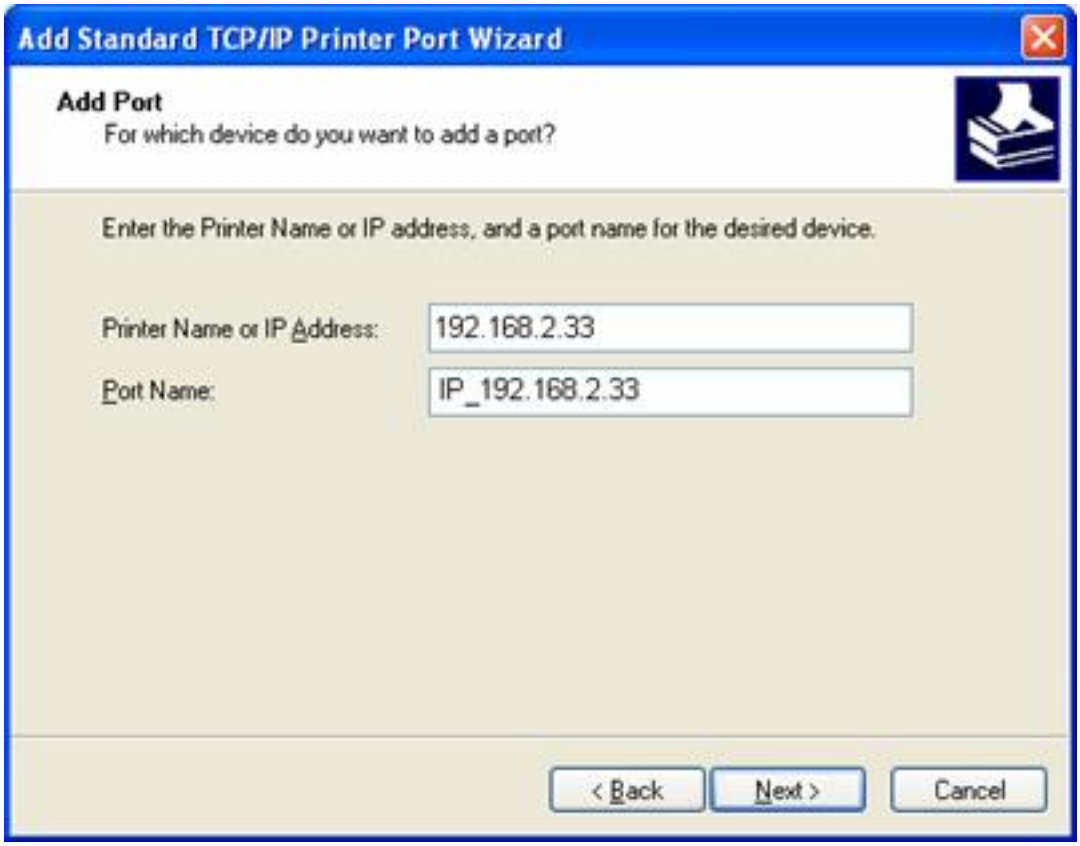
Windows 2000/XP Setup

The recommended printing method is to use LPR, as follows:

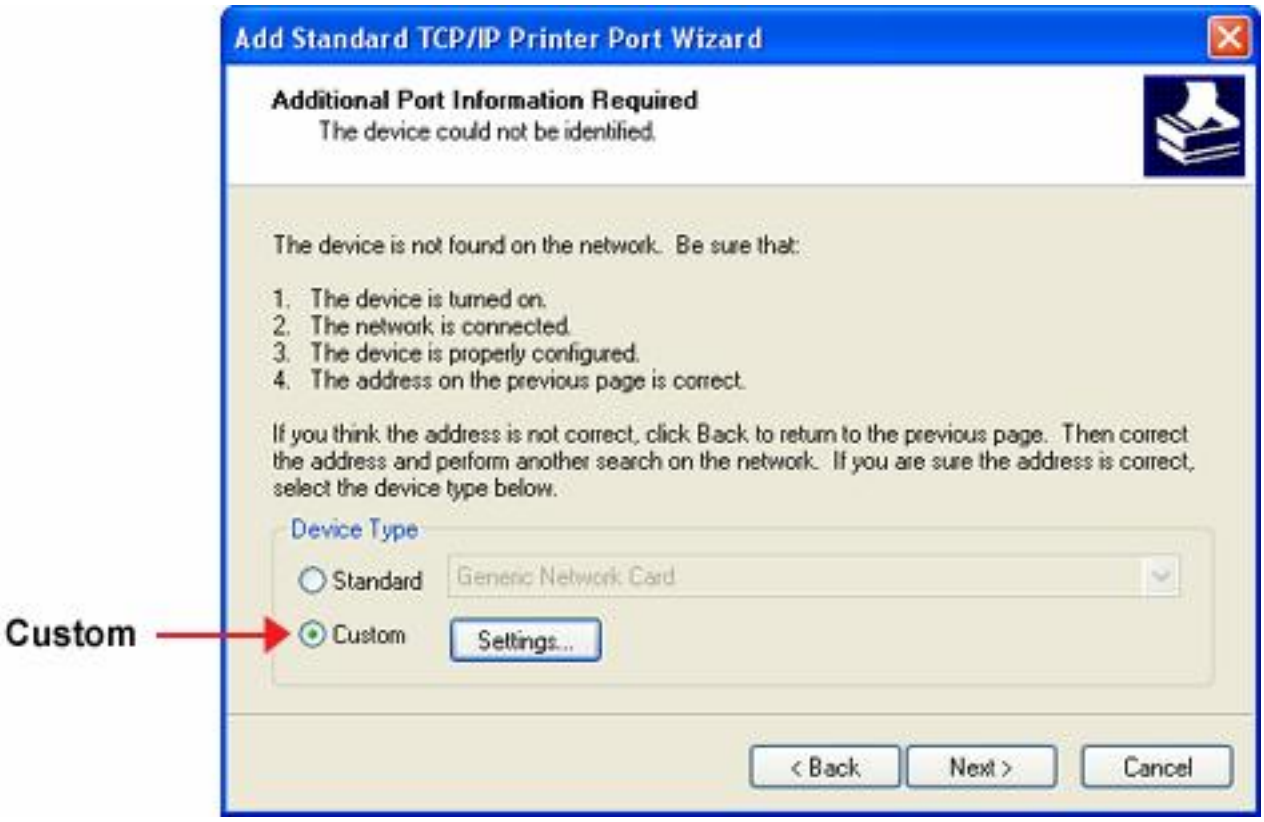
1. Open your Printers folder, right-click the desired printer, and select **Properties**.
2. Select the **Ports** tab and click **Add Port**.
3. Select **Standard TCP/IP Port** and then click **New Port**.



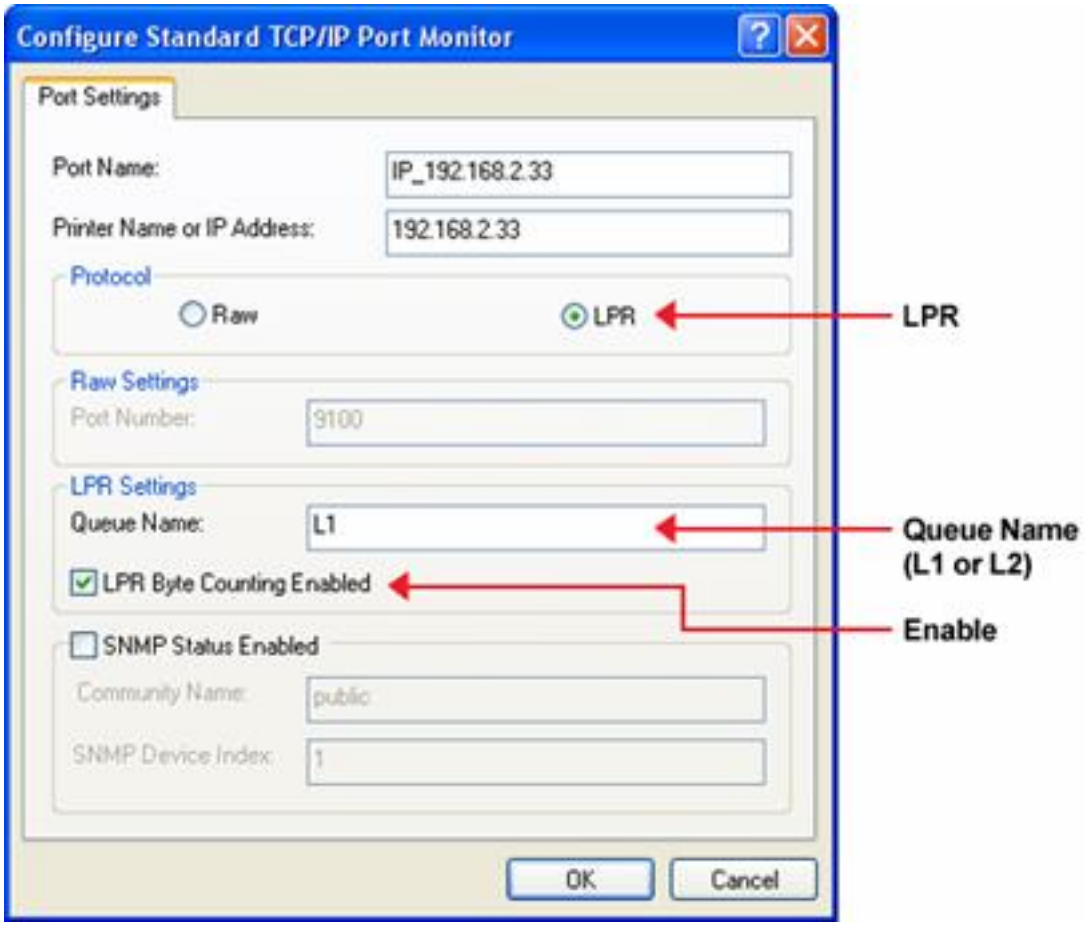
4. On the Add Standard TCP/IP Printer Port screen above, enter the IP Address of the Print Server in the Printer Name or IP Address field and then click **Next**.



5. On this screen, select **Custom** and click **Settings**.



6. On the Port Settings screen, select **LPR** in the Protocol section. Enter a **Queue name** (L1 for the USB Port). Ensure the **LPR Byte Counting Enabled** setting is **Enabled**. Click **OK** to confirm your changes and close this screen.



7. Follow the prompts to complete the Wizard.

Windows 9x/ME Setup

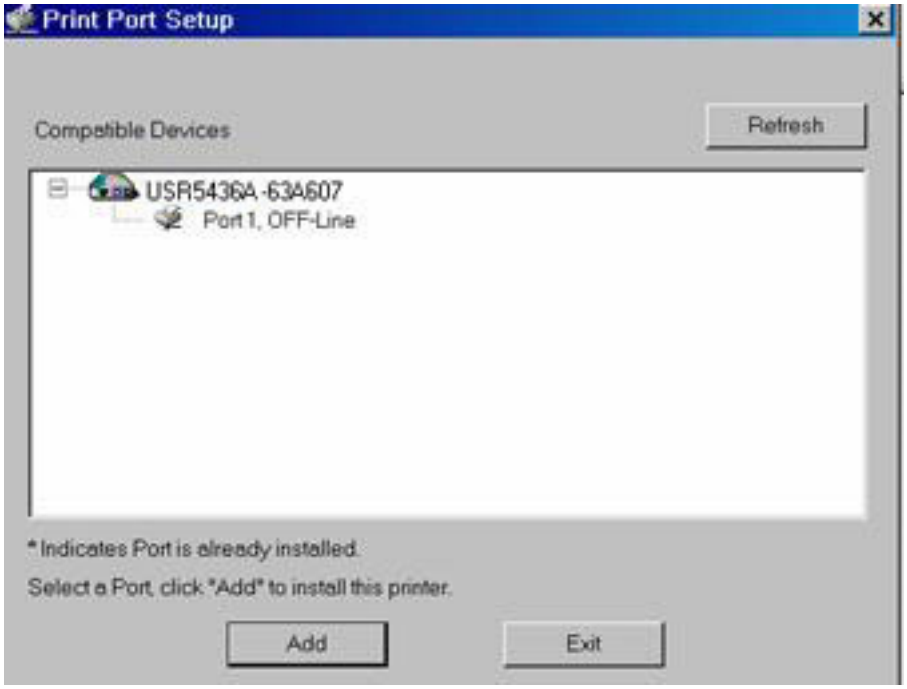
Before performing the following procedure, the Wireless USB Print Server must be installed on your LAN, and configured as described in **Installation**. Both the Wireless USB Print Server and the attached printer should be powered ON.

1. Insert the U.S. Robotics Installation CD-ROM into your CD-ROM drive.
2. Click **Additional Installs** and then select the **User**.
3. Follow the prompts to complete the installation of the Peer-to-peer Printer Port Driver.
4. The Print Driver Setup will then launch.

In future, you can click Windows **Start** > **Programs > U.S. Robotics Print Server > Printer Driver Setup** to run the program again.

PTP (Peer-to-Peer) Printer Port Setup

1. The program will search for Printer Servers on the network, and a screen like the following will be displayed. If desired, click **Refresh** to update the list. The name of the attached printer will be displayed if possible. If No printer is displayed, make sure that the printer is properly connected and powered on.



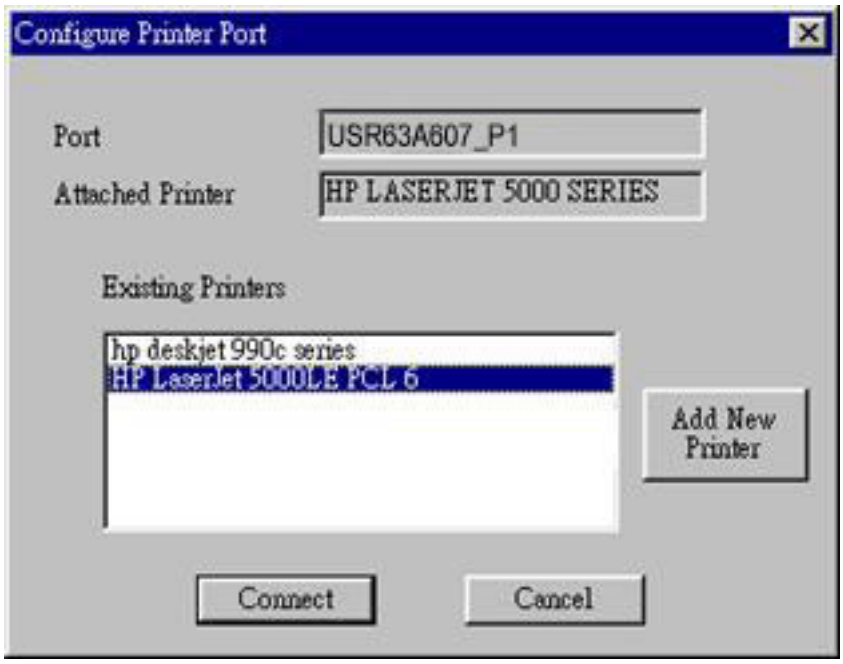
If your Wireless USB Print Server is not listed, perform the following:

- Click the Refresh button.
- Check that both the Wireless USB Print Server and the printer are properly connected, and powered on.
- Check that the Wireless USB Print Server has been configured. (Use the **Setup Wizard** on the CD-ROM.)
- If using TCP/IP, **try installing the NetBEUI protocol**. Then try again.

2. Select the desired port on a Wireless USB Print Server and then click **Next**. A message will inform you if the port has been created successfully.

If you see the following error message, either install Internet Explorer 4 or later or go to **Troubleshooting**.

3. The printer port will be created, then a screen similar to the one below will be displayed.



4. Select the correct Windows printer in the Existing Printers list and click **Connect**.

   If the correct printer type is not listed, click **Add New Printer** to run the Windows Add Printer wizard. Perform the following steps of the Wizard and install the required printer:

- Select the correct Printer Manufacturer and Model or click **Have Disk** if you have the printer manufacturer's Installation CD-ROM.
- It is recommended that you change the Printer name to indicate the device to which it is connected. (e.g. HP2100 on SCA43600_P1)
- If prompted about Sharing the printer, do not enable Sharing.
- When the Printer installation is finished, it will be listed in the Configure Printer Port screen. Select the printer and click **Connect**.

5. Installation is complete and you can now print using this printer.

To install additional Printers, repeat steps 1-4.

To run this program in the future, click Windows **Start** and then **Programs** (this may

be slightly different depending on your version of Windows). Click **Print Server Utility** and then **Print Driver Setup**.

Note: If using the Epson Spooler Manager, this program must be disabled, as follows:
1. Run the Epson Spooler Manager.
2. Select **Queue Setup** from the menu.
3. Click **Use Print Manager for this port**.
4. Click **OK** to exit.

PTP (Peer-to-Peer) Printer Port Management

Print jobs can be managed like any Windows printer. Open the Printers folder by click Windows **Start**, **Settings**, and then **Printers** (this may be slightly different depending on your version of Windows). Double-click any printer to see the current print jobs.

If the printer attached to the Wireless USB Print Server is changed, run this program again and select the correct printer.

To delete a port created by this setup program, use the Windows *Delete Port* option:

1. Right-click any printer in the Printers folder and select **Properties**.
2. Locate the and click **Delete Port**. This button is on the **Details** or **Ports** tab, depending on your version of Windows.

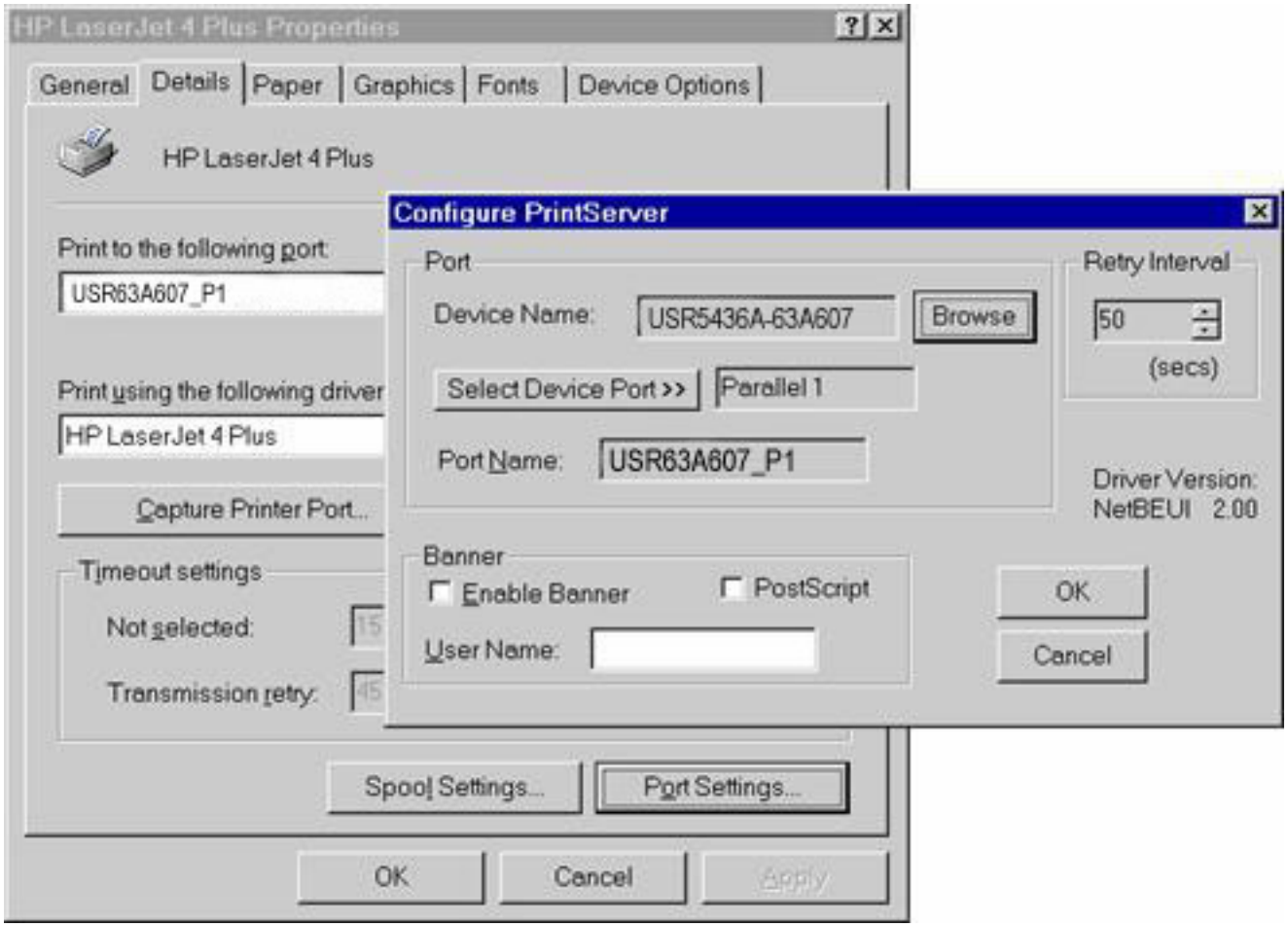
If the Wireless USB Print Server's IP Address is changed and you can no longer print, delete the port (see procedure above) and re-install it.

PTP (Peer-to-Peer) Printer Port Advanced Options

Perform the following steps to access the Peer-to-peer Printing options.

Click Windows **Start**, **Settings**, and then **Printers** (this may be slightly different depending on your version of Windows) to open the Printers folder. Right-click the printer and select **Properties**. The **Port Settings** button is on the **Details** or **Ports** tab, depending on your version of Windows. Click **Port Settings**.

An example screen is shown below:



Items shown on this screen are as follows:

Port: If desired, click **Browse** to select a different Wireless USB Print Server. If the selected device has multiple ports, the Select Device Port button can be used to select the port. The Port Name can not be changed after installation. This name is shown in the Printer's Properties.

Banner: Check this option to print a banner page before each print job.

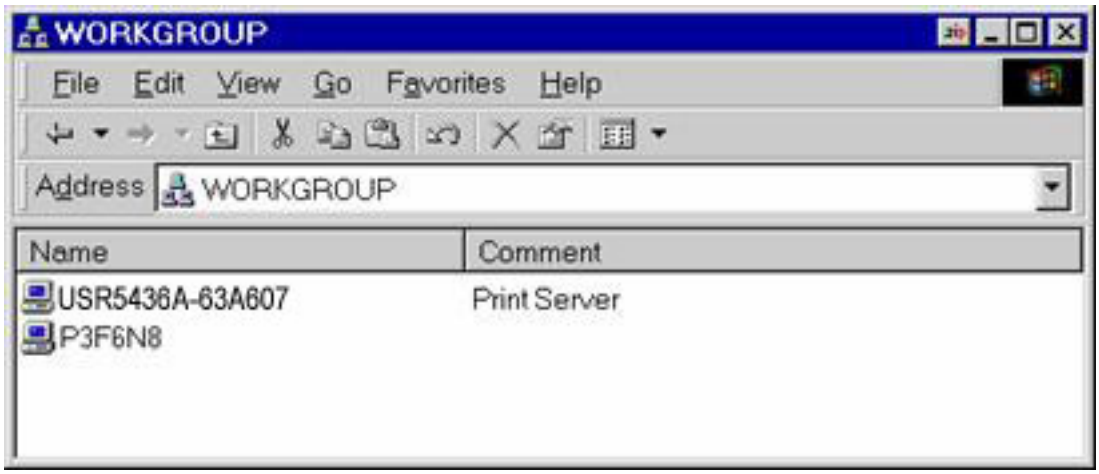
- If using a PostScript Printer, select the **PostScript** checkbox.
- The User Name will be printed on the banner page.

Retry Interval: Sets how often Windows will poll the Wireless USB Print Server to establish a connection when the printer is busy. Increase this value if you get too many warning messages.

Windows SMB Printing

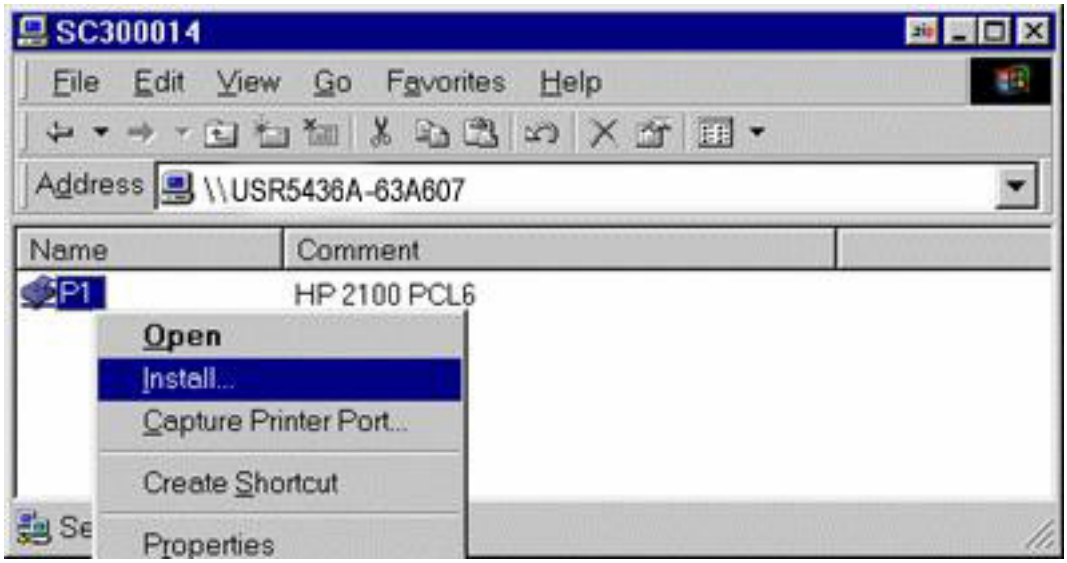
This method requires no additional software to be installed, but the NetBEUI or TCP/IP protocol must be installed on your computer. Use the following procedure to install the Wireless USB Print Server's printer as a Windows SMB network printer:

1. Double-click the Network Neighborhood icon on the desktop.
2. On the *View* menu, click **Details**.
3. Locate the desired Wireless USB Print Server, as shown below:



- If it is the same Workgroup as your computer, it will be listed on screen.
- If it is in a different workgroup, double-click *Entire Network*, then double-click the appropriate Workgroup to open it.

4. Double-click the Wireless USB Print Server icon to view a Printer icon for each printer port. The Comment field may indicate what type of printer is connected to the port.
5. To install a printer, right-click the desired printer icon and select **Install**. This will start the Add Printer wizard.



6. Follow the on-screen prompts to complete the installation.

7. Select the Printer Manufacturer and Model to match the printer connected to this port on the Wireless USB Print Server and complete the Wizard.

8. This printer will now appear in your Printers folder and can be used like any other printer. However, SMB printing is not suitable for large complex print jobs; you should use the *Peer-to-peer Printing* instead.

Windows with Server-based Print Queues

With a Server-based Print Queue, the Print Server is installed on an existing Network Server (Windows, Unix, or NetWare), rather than on your computer. If your Network Administrator uses this system, each Windows client must be set up in the following manner:

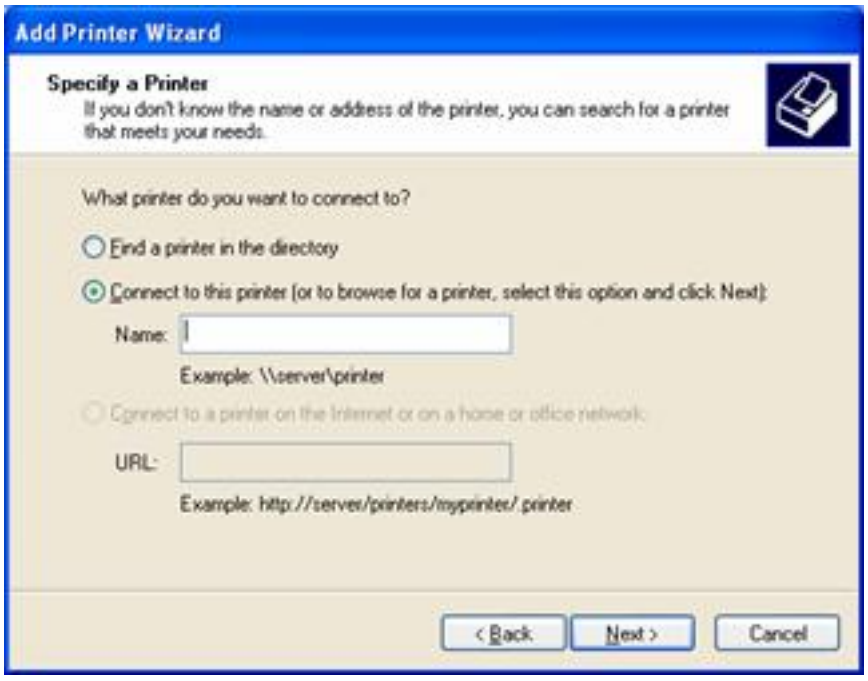
1. Click Windows **Start**, **Settings**, and then **Printers** (this may be slightly different depending on your version of Windows) to open the Printers folder.

2. When prompted, select **Network Printer**.

3. When prompted for **Network Path or Queue Name**, Windows 98 and Me users should click **Browse**. Windows 2000/XP users should leave the field blank and click **Next**.

   Windows 98/ME:

Windows XP:



4. Browse the network, and locate the Server and Printer (or Print Queue) which your Network Administrator advised you to use.

5. Click **OK** and then **Next**.

6. Select the correct printer Manufacturer and Model, as advised by your Network Administrator, and click **Next**.

7. Follow the prompts to complete the Wizard.

The new printer will be listed with any other installed printers, and may be selected when printing from any Windows application.

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USRobotics

IPP (Internet Printing Protocol)

IPP (Internet Printing Protocol) is a standards-based system to allow remote printing from a computer to any accessible printer. Normally, the printer will be attached to a computer or other device which functions as an IPP Server.

Client computers need a compatible IPP Client program. Windows 2000 and XP include a suitable IPP client. For other versions of Windows, a client program is supplied on the **Wireless USB Print Server's CD-ROM**. The Client must also know the IP Address or URL of the IPP Server.

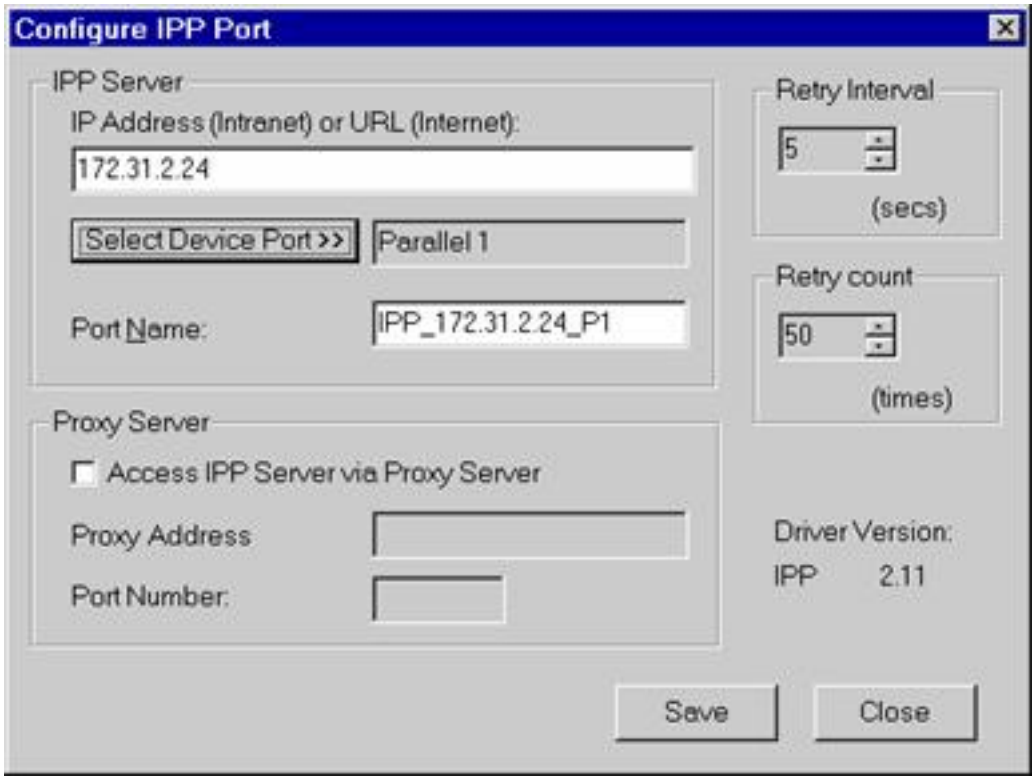
IPP Server Configuration

The Print Server contains the necessary firmware to act as an IPP Server. No additional configuration is necessary. However, the following requirements must be met.

- The Print Server must have a valid IP Address.
- Any router, gateway, or firewall linking your LAN to the Internet must NOT block the IPP protocol (TCP port 631). Your router, gateway or firewall must open or forward port TCP port 631 to the IP address of the Print Server.
- You must advise clients of the correct URL or IP Address of the IPP Server. To use a URL rather than an IP Address, you need to register the domain name for the URL.
- Unless clients are using Windows 2000 or XP, you must provide your clients with the supplied IPP Client software. If it is not convenient to provide the CD-ROM, supply the IPP_CLIENT.EXE file, located in the IPP folder.

IPP Client Configuration

1. Run the Add IPP Port program entry created by the installation. A screen like the following will be displayed.

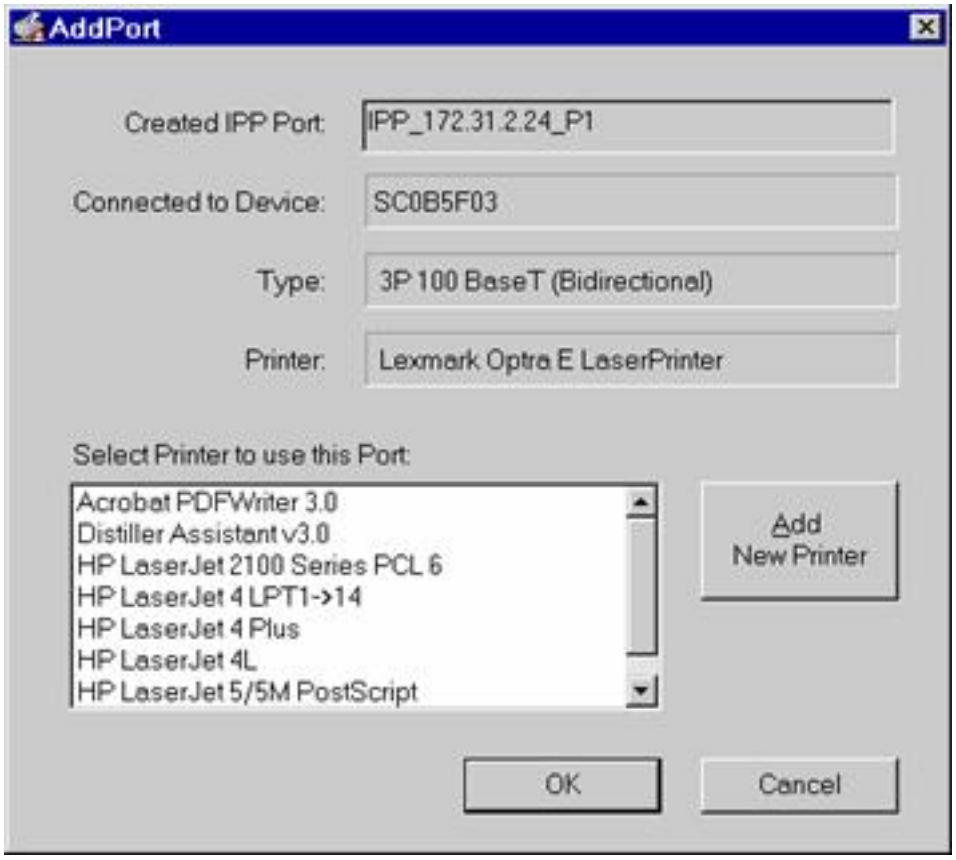


2. If Internet access from your location is via a Proxy Server, select **Access IPP Server via Proxy Server** and enter the details of your Proxy Server. (This will be the same as your Browser configuration.)

3. Enter the IP Address or URL of the IPP Server.

4. Click **Select Device Port** to view the available ports on the IPP Server and select the appropriate port. A connection to the IPP Server will be established at this time.

5. Click **Save** to create the IPP port on your system. You will see a message confirming that the port has been created, then the following dialog:



6. Perform one of the following options:

- Select an existing printer to use the new port and click **OK**.

  OR

- Click **Add New Printer** to create a new printer to use the IPP port. This will start the Add Printer wizard. Follow the prompts to complete the process. Ensure that the new printer uses the IPP port.

Installation is now complete. To create additional IPP Ports, repeat the entire procedure. The Proxy Server and other options are set individually for each IPP Port.

Changing the IPP Port Settings

After the IPP port is created, perform the following steps:

1. Click Windows **Start**, **Settings**, and then **Printers**.
2. Right-click the IPP Printer and select **Properties**.
3. Locate and click **Port Settings** (in the Details or Port tab, depending on your version of Windows).

There are 2 settings - Retry Interval and Retry Count - which can be adjusted if you have problems connecting to the IPP Server.

- **Retry Interval** sets the time interval (in seconds) between connection attempts. Increase this number if you have a poor connection, or the remote server is very busy.
- **Retry Count** sets how many connection attempts will be made. Increase this number if you have a poor connection, or the remote server is very busy.

IPP Client Setup - Windows 2000/XP

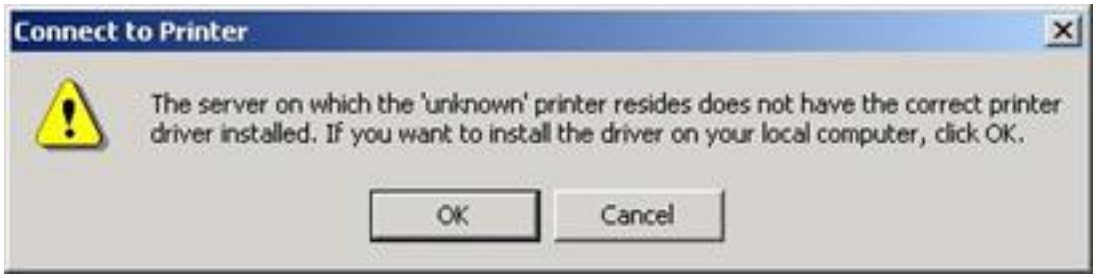
Windows 2000 and XP have their own IPP Client, and there is no need to install the supplied IPP Client Software. To use the Windows IPP Client with the Print Server, follow this procedure:

1. Start the Add Printer wizard.
2. Select **Network Printer** and click **Next** to see the Locate your Printer screen, as shown below.

3. Select **Connect to a printer on the Internet or on your Intranet** and enter the URL of the IPP Server as follows, where ip_address represents the IP Address of the IPP Server and 631 is the port number.

Port 1	ip_address:631/ipp/P1
These entries are case sensitive. They must be entered as shown, with ipp in lower case, and P1 in UPPER case.	

4. If the connection can be established and the printer on that port is online, the following dialog will be displayed:



5. Click **OK** and then select the printer manufacturer and model to match the printer connected to the port on the IPP Server.

6. Click **Next** and complete the Wizard. The IPP printer is now ready for use.

Using IPP Printers

The IPP Printer can be selected and used like any other Windows printer. If the IPP Server is not on your network, your Internet connection needs to be active.

If using the supplied IPP Client software, you can use the Query IPP Printer program installed with Add IPP Port to check the availability of the remote IPP Server.

An IPP Server may be unavailable for any of the following reasons:

- It is powered off.
- A printer problem has caused the IPP Server to cease responding, and a restart (reboot) is required.
- The Server's IP Address has changed.
- The Internet connection for the IPP Server is down.

- Network congestion causes the connection attempt to time out.

If using the supplied IPP Client software, there are 2 settings - Retry Interval and Retry Count - which can be adjusted if you have problems connecting to the IPP Server.

See the **Changing the IPP Port Settings** section on this page for details.

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Troubleshooting Support

Basic Troubleshooting Procedure

This procedure addresses a number of symptoms that you might experience with your print server:

1. Verify the physical cable connections between the print server, the printer, your router, and your power outlet.
2. Ensure that the power outlet to which the print server is connected is a live outlet.
3. Refer to the **LED descriptions** and then check the LEDs on the print server to make sure you are receiving power and that there is not a print error.

If you still have trouble using the router, follow the procedure below that best describes your symptom.

For specific operating system platform information, go to the appropriate section:

Windows

Macintosh

Unix

Windows Troubleshooting

Macintosh

Unix

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Support

1. Know your model and serial number.

   Your model number is 5436A. You can find your serial number on the side of the package and on the bottom of the router.

2. Go to the Support section of the USRobotics Web site at **www.usr.com/support**

   Many of the most common difficulties that users experience have been addressed in the FAQ and Troubleshooting Web pages for your router.

   The Support Web pages also contain information on the latest firmware and documentation updates.

3. Submit your technical support question using an online form, or contact the USRobotics Technical Support Department.

Country	Webmail	Voice
United States & Canada	**http://www.usr.com/emailsupport**	(888) 216-2850

Country	Webmail	Voice
Austria	**www.usr.com/emailsupport/de**	07110 900 116
Belgium (Flemish)	**www.usr.com/emailsupport/bn**	070 23 35 45
Belgium (French)	**www.usr.com/emailsupport/bn**	070 23 35 46
Czech Republic	**www.usr.com/emailsupport/cz**	

Denmark	www.usr.com/emailsupport/ea	38323011
Finland	www.usr.com/emailsupport/ea	08 0091 3100
France	www.usr.com/emailsupport/fr	0825 070 693
Germany	www.usr.com/emailsupport/de	0180 567 1548
Greece	www.usr.com/emailsupport/gr	
Hungary	www.usr.com/emailsupport/hu	0180 567 1548
Ireland	www.usr.com/emailsupport/uk	1890 252 130
Italy	www.usr.com/emailsupport/it	800 979 266
Luxembourg	www.usr.com/emailsupport/be	342 080 8318
Middle East/Africa	www.usr.com/emailsupport/me	+44 870 844 4546
Netherlands	www.usr.com/emailsupport/bn	0900 202 5857
Norway	www.usr.com/emailsupport/ea	23 16 22 37
Poland	www.usr.com/emailsupport/pl	
Portugal	www.usr.com/emailsupport/pt	0 21 415 4034
Russia	www.usr.com/emailsupport/ru	8 800 200 20 01
Spain	www.usr.com/emailsupport/es	902 117964
Sweden	www.usr.com/emailsupport/se	08 5016 3205
Switzerland	www.usr.com/emailsupport/de	0848 840 200
Turkey	www.usr.com/emailsupport/tk	0212 444 4 877
UAE	www.usr.com/emailsupport/me	0800 877 63
United Kingdom	www.usr.com/emailsupport/uk	0870 844 4546

For current support contact information, go to: www.usr.com/emailsupport